



GAMBLING IMPACT STUDY:

Part 1, Section A: Assessment of the Florida Gaming Industry and its Economic Effects (submitted July 1, 2013)

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Part 1, Section B: Assessment of Potential Changes to Florida Gaming Industry and Resulting Economic Effects

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Part 2 : Statistical Relationships between Gaming and Economic Variables for Communities

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Note: This document combines all three parts of Florida Gaming Study for convenience. Part 1A was submitted on July 1, 2013, and is provided here without change (although we do note there is an addendum); therefore it includes language referring to future reports (i.e., Part 1B and Part 2) that are now included in this same document package.

Executive Summary: Part 1A

Introduction

The Florida Legislature commissioned Spectrum Gaming Group to undertake a three-part study of legalized gambling, focusing on its economic effects (including the social costs). This report, the first in the series, is divided into two primary parts:

- The first provides overviews of many aspects of gambling generally, both nationally and as they pertain to Florida (as relevant). Because this part consists of summaries of existing data and research, we have not summarized the content in this Executive Summary.
- The second provides the economic impacts of Florida's existing gambling industry as it stands now – including the Florida Lottery, the pari-mutuel industry including slot machines and cardrooms, and Indian casinos. We provide the key performance data by sector and, working in concert with project partner Regional Economic Models Inc. (“REMI”), we provide the economic and fiscal impacts of these gambling sectors. The key findings are provided below in this Executive Summary.

This report is the product of a far-reaching scope of research and analysis. In many respects, it is a collection of several reports. We have provided a detailed Table of Contents that allows readers to easily find the topics of greatest interest to them. While reading this report, it is important that readers understand the Legislature's instructions:

- Spectrum will not make recommendations in any of its reports. The Legislature commissioned Spectrum to undertake an economic and academic study for the purpose of educating the state's policymakers and other stakeholders so that they may make enlightened decisions regarding the future of gambling in their state.
- This is the first of three reports due to the Legislature. The two additional reports will be delivered by Spectrum on or before October 1, 2013, are as follows: Part 1, Section B: *Assessment of potential changes and economic effects*; and Part 2: *Statistical relationships between gaming and economic variables for communities*.

- Spectrum was tasked with analyzing the social costs associated with gambling in the second report. While this initial report provides a discussion of the many social costs of gambling, in Part 1B, as part of our next report, we will determine the costs as they relate to expanded gambling in Florida.

Key Gambling Sector Findings

First, we review the key performance data for each of Florida's three primary gambling sectors – pari-mutuel (including the subsectors of slots, cardrooms and pari-mutuel wagering) lottery, and Indian casinos.

Pari-Mutuel

Three distinct types of gambling take place under the umbrella of Florida's pari-mutuel industry, only one of which actually involves pari-mutuel wagering. Because state-regulated slot machines and cardrooms must be coupled with a pari-mutuel license, these activities are offered only at racetracks and jai alai frontons. All three types of gambling are regulated by the Division of Pari-Mutuel Wagering, a unit of the Department of Business & Professional Regulation.

Racetrack Slots

- The racetrack slot industry (i.e., racinos), which is legally restricted to Broward and Miami-Dade counties, has steadily grown since inception in 2006. The six racinos in 2012 reported gross slot revenue of \$489.2 million and are set for continued growth with the opening of slots at Hialeah Park in summer 2013.
- The racinos in 2012 had 3,319 employees and generated \$149.8 million in taxes directly from slot revenue. Gross slot revenue is taxed at 35 percent.

Cardrooms

- Twenty-four pari-mutuel facilities operate cardrooms, which are restricted to poker and dominoes (which is rarely offered or played). Cardrooms last year generated \$131 million gross receipts and paid a tax of \$13.1 million.
- Cardrooms pay a state tax of 10 percent on gross receipts. Additionally, at jai alai and greyhound facilities 4 percent of cardroom gross receipts are used to fund purses and player awards; the figure is 50 percent at horse race facilities.

Pari-Mutuel Wagering

Most pari-mutuel facilities lose money on their pari-mutuel operations and need cardroom and/or casino revenue to subsidize those losses.

It is important to note that the total handle numbers cited below are understated because the Division of Pari-Mutuel Wagering does not collect data on out-of-state generated handle, which is the single largest component of handle.

- Greyhound racing:* Total handle for the 13 facilities that ran greyhound racing fell from \$933.8 million in FY 1990 to \$265.4 million in FY 2012, a decline of 67 percent – mirroring the decline nationally. The number of Florida greyhound performances (a racing card of at least eight races) fell from 3,853 to 3,636, a decline of only 6 percent. One of the reasons for the relatively small decline is because of the 90 percent rule: Operators with cardrooms are required to conduct at least 90 percent of the live performances that were held the year before their cardrooms opened, which for many of them was 1996. Although attendance has declined precipitously since 1990, reliable figures are unavailable because most tracks no longer charge for admission.
- Thoroughbred racing:* Thoroughbred racing is the dominant pari-mutuel sector in Florida, with the three tracks accounting for 61 percent of total Florida handle in FY 2012. A Florida thoroughbred operator must run a minimum of 40 performances a year. From FY 1990 to FY 2012, Florida thoroughbred performances fell from 348 to 327, a decline of 6 percent; paid attendance fell from 653,206 to 97,738, a decline of 85 percent. Total handle in FY 2012 was \$530.7 million and live handle was \$78.6 million; both figures are in decline, although they have somewhat stabilized since slots were introduced at two of the tracks. Purses increased from \$78.1 million to \$81.1 million, a rise of 16 percent. The three tracks generated a combined operating profit of \$13 million for FY 2012. Much of the profit, \$10.6 million, came from pari-mutuel operations, with the rest from slots and/or cardrooms.
- Harness racing:* Florida’s sole harness track, Isle Casino and Racing at Pompano, accounted for 5 percent of total Florida handle in FY 2012. The Pompano track must run at least 140 performances a year but it can seek a one-time, 10 percent reduction from the 140-performance minimum. Attendance has declined such that Isle Pompano no longer charges admission and attendance figures are not kept. Total handle in FY 2012 was \$49.5 million and live handle was \$4.4 million; both figures are about the same as the year earlier.
- Quarter horse racing:* Quarter horse racing returned to Florida in November 2009 at Hialeah Park after an 18-year absence. Quarter horse racing (inclusive of barrel racing) accounted for less than 1 percent of total Florida handle in FY 2012. Quarter horse racing had 76 performances in FY 2012. It generated a live handle of \$1.7 million, total handle of \$2.1 million and purses of \$3.8 million. Almost all of the traditional quarter horse activity was at Hialeah, where the operator subsidized purses as part of its contract with horsemen.
- Jai alai:* Of all the pari-mutuel sectors, jai alai has sustained the steepest cuts in attendance and popularity. Since 1990, total handle has fallen 91 percent, live

handle 96 percent, player awards 63 percent and performances, 63 percent. In 1990, 3.9 million people paid to watch the sport. In 2012, total paid attendance was 9,068. From pari-mutuel operations, the jai alai sector sustained an operating loss of \$14 million. Their cardrooms were able to generate an operating profit of \$1 million. Miami Jai Alai had the highest handle at \$6.6 million in FY 2012.

Lottery

The Florida Lottery reported FY 2012 sales of a record \$4.45 billion, up 11 percent over the previous year, ranking third in the nation in total sales revenue (FY 2011), behind New York (including its video gaming machine revenue) and Massachusetts. On a per-capita basis, Lottery sales were \$233, also a state record.

Since its inception in 1988, the Lottery has provided a total of \$24 billion to the Educational Enhancement Trust Fund (“EETF”). In the past fiscal year the EETF has allocated \$317 million for construction bonds, provided \$271 million for public school funding, \$130 million for state colleges, and \$254 million for state universities. Since 1997 the Florida Lottery has also provided scholarships to more than 600,000 students through the Bright Futures Scholarship Program, funded primarily through Lottery financial transfers. Lottery tickets are sold at 13,300 retail locations throughout the state.

Indian Casinos

The Seminole Tribe of Florida operates seven casinos, and the Miccosukee Tribe operates one casino. The Seminole Tribe advised Spectrum that in 2012 its gaming facilities employed 9,562 total employees, or 7,725 full-time-equivalent employees (“FTEs”). Another 4,000 are employed by Seminole casino facility tenants, such as retailers who operate on-site outlets. The Miccosukee Tribe declined to cooperate with this study, although a Miccosukee Gaming & Resort employee advised Spectrum that its gaming property employs “over 800.”

The Seminole Gaming enterprise generated \$1.96 billion in GGR in 2012 at its properties, and we estimate statewide GGR at Indian casinos to be \$2.2 billion.

At least two other Indian tribes/nations are trying to operate casinos in Florida:

- The Poarch Band of Creek Indians, based in Atmore, AL, has land in Escambia County, which is held in trust by the US government, and also owns, or has options to own, or agreements to control 10 pari-mutuel permits along the Interstate 10 corridor between Pensacola and Jacksonville. The Poarch Band said it is seeking to negotiate an agreement, which could include revenue-sharing, with the State to operate Class II gaming.
- For the past decade the Muscogee Nation of Florida has been pursuing federal recognition by act of Congress in order to initiate gaming operations as a

means of economic development. Tribal landholdings are well positioned to offer casino gaming in the Florida panhandle.

Fiscal Impacts

Our analysis examines the total economic and fiscal impacts of the gambling industry by subsectors in 2012. Spectrum found that Florida’s gambling industry directly employed 15,748 and supported an additional 10,063 jobs. Its impact on induced jobs was 4,983; when factoring in the estimated number of additional jobs created by retailers selling lottery tickets, Spectrum found that Florida’s gambling industry was responsible for 55,648 direct jobs, 14,269 indirect jobs and 19,025 induced jobs.

Following are the economic and fiscal impacts by gambling sector:

2012	Direct Employment	Indirect Employment	Induced Employment	State Tax Revenues (FY 2013) (M)
Pari-mutuel	4,953	1,659	1,309	\$206.6
Lottery	408	2,267	-111	\$1,882.0
Retail Lottery	39,900	4,206	14,042	\$123.7
Native American Casinos	10,387	6,137	3,785	\$293.3
Floridians’ Out-of-State Gaming Spending	0	693	3,143	\$15.4
2012-2060 Slow Growth	Average Annual Direct Employment	Average Annual Indirect Employment	Average Annual Induced Employment	Average Annual State Tax Revenues (FY2013-2060) (M)
Pari-mutuel	5,449	1,757	-1,298	\$587
Lottery	449	5,295	969	\$3,452
Retail Lottery	39,099	10,148	28,918	\$581
Native American Casinos	10,933	6,246	769	\$401
Floridians’ Out-of-State Gaming Spending	0	488	2,334	\$28.6
2012-2060 Normal Growth	Average Annual Direct Employment	Average Annual Indirect Employment	Average Annual Induced Employment	Average Annual State Tax Revenues (FY 2013-2060) (M)
Pari-mutuel	5,449	1,607	-1,939	\$581
Lottery	449	5,288	-1,106	\$3,561
Retail Lottery	39,099	9,775	27,674	\$590
Native American Casinos	10,933	5,660	-473	\$374
Floridians’ Out-of-State Gaming Spending	0	455	2,239	\$27
2012-2060 Strong Growth	Average Annual Direct Employment	Average Annual Indirect Employment	Average Annual Induced Employment	Average Annual State Tax Revenues (FY 2013- 2060) (M)
Pari-mutuel	5,449	1,478	-2,506	\$575
Lottery	449	5,256	-1,239	\$3,645
Retail Lottery	39,099	9,418	26,330	\$551
Native American Casinos	10,933	5,145	-1,605	\$364
Floridians’ Out-of-State Gaming Spending	0	428	2,157	\$25

Source: Regional Economic Models Inc., Spectrum Gaming Group

Executive Summary: Parts 1B and 2

The Florida Legislature commissioned Spectrum Gaming Group to undertake a three-part study of legalized gambling, focusing on its economic effects and social costs. The first part, *Part 1, Section A: Assessment of the Florida gaming industry and its economic effects*, was delivered by Spectrum to the Legislature on July 1, 2013. This report combines the final two parts:

- Part 1B: An assessment of potential changes and economic effects (via extensive analysis of potential changes to the state’s gaming industry, under a variety of scenarios as requested by the Legislature), and;
- Part 2: Statistical relationships between gaming and economic variables for communities.

While reading this report, it is important that readers understand the Legislature’s instruction to not make recommendations in any of its reports. The Legislature commissioned Spectrum to undertake an economic and academic study for the purpose of educating the state’s policymakers and other stakeholders so that they may make enlightened decisions regarding the future of gambling in Florida.

Spectrum professionals appeared before the Senate Gaming Committee and the House Select Committee on Gaming as part of this engagement. Committee members in both chambers asked a variety of thoughtful questions, and expressed views that demonstrate the complexity of this issue and that highlight the challenges facing the Legislature as it considers future gaming policies. Rep. Matt Gaetz offered a telling observation, noting: “As I’ve read the report, and heard the reactions of the report ... it’s sort of become this session’s version of the Rorschach test, where everyone can stare at the inkblot and see what they want to see.”¹

Indeed, that apt analogy has been put forth by other legislators in other states, most notably by Sen. Jim Whelan of New Jersey, whose district includes Atlantic City, where he previously served as mayor. In Whelan’s analogy, Atlantic City is a “Rorschach test” in which pro- or anti-gaming advocates can find ammunition to support their views. That characterization highlights the layers of complexity that surround any analysis of the economic and social impacts of gaming, and should serve as a cautionary note that no individual finding or data point lends itself to a simple conclusion, and that any quantitative analysis must be accompanied by a thoughtful qualitative analysis.

¹ Gray Rohrer, “House Panel Looks at Gambling Study, Finds few Conclusions,” *Florida Current*, October 9, 2013; <http://www.thefloridacurrent.com/article.cfm?id=34805348>.

Combined Report Conclusion

This combined report examines the economic impact question from three separate analytical methodologies: gravity model, the REMI² model, and forecasts based on previous econometric results. Although the three methods have key distinctions in their assumptions and data, their findings are similar. Overall, Spectrum believes that the expansion of casino gambling, whether on a small scale or very large scale, would have a moderately positive impact on the state economy. This is not to say that the economic impacts are necessarily small in their own right – in fact, under some expansion scenarios the economic modeling shows gains of tens of thousands of direct, indirect and induced jobs – but that the impacts are relative to Florida’s large, statewide economy.

There would certainly be a net increase in state tax receipts, to the extent that additional gambling opportunities increase tourism and casino taxes are set above sales tax rates. There are likely to be only mild positive impacts on local and statewide employment and wages, however. This is because casinos would not represent a large expansion of their local economies (at least, in larger Florida counties, which we assume would be the most likely sites for any future casino expansion). Finally, the social costs of gambling should be kept in mind. However, the evidence suggests that social costs would not change dramatically, especially since gambling opportunities are already widespread across Florida.

Part 1B – Key Findings

Economic/Fiscal

Spectrum analyzed Florida’s baseline gaming industry and 12 gaming-expansion scenarios³ provided by the Legislature (and under some scenarios, we analyzed each with certain material variations). For each scenario, we provide key economic/fiscal impacts after the 10th year, using the State of Florida’s Default Budget/Florida pari-mutuel gaming tax rate. Note that the scenario results are in comparison to the Baseline level. Additionally, we provide qualitative implications and considerations for each scenario.

The scenarios are as follows:

² Regional Economic Models Inc., Spectrum’s economic-modeling partner for this project.

³ In all scenarios, it is important to note that (1) All revenue projections are expressed in current dollars unless specifically noted otherwise; (2) as applicable, revenue projections and resultant fiscal impacts are adjusted for future years based upon REMI’s forecasted inflationary growth, as well as with respect to changes in adult population; and (3) all projections include slot operations at Hialeah Park, for which we assumed a September 1, 2013, opening date (although it actually opened August 14, 2013), and at Dania Jai-Alai, for which we assume an opening date of July 1, 2014.

- **Baseline:** The Florida casino landscape reflects the current law/current administration, and assumes that the banked card provision of the Seminole Compact will expire, and not be renewed (as we cannot assume a governmental action as part of our baseline).⁴ There are 16 casinos in six counties having a total of 22,973 slots, or gaming positions, and no table games.
 - Total state employment: 11,453,282
 - Gross State Product: \$1.466 trillion
 - Gaming taxes: \$312 million
 - Compact revenues: \$121 million
 - Implications/considerations:
 - Revenue sharing per the Seminole Compact would exclude net win generated at the Seminole Tribe’s Broward County facilities.
 - Expiration of the banked card provision of the Seminole Compact may help to level the competitive playing field between the pari-mutuel casino industry and the Seminole casino enterprise.

- **Scenario A:** Renewal of the Seminole Tribe’s exclusive authorization to conduct banked card games on Indian lands, as defined in the Indian Gaming Regulatory Act. No new casinos; however, the 344 table games currently operated by the Tribe are included in this scenario.⁵ This scenario depicts a 9 percent increase in statewide gaming positions over the baseline.
 - **Scenario A**
 - Change in employment: +1,581
 - Change in Gross State Product: +\$227 million
 - Change in gaming taxes: -\$16 million
 - Change in Compact revenues: +\$193 million
 - **Scenario A-1** *authorizes the end of live performances at pari-mutuel facilities (i.e., decoupling).*
 - Change in employment: +1,154

⁴ As it relates to economic impacts, the Florida Office of Economic and Demographic Research provided REMI with a budget file for Tax-PI calibrated to its understanding of current law/current administration as of June 21, 2013.

⁵ The banked card provisions of the Seminole Compact are renewed for an additional 15 years and the Compact is not otherwise amended – this is an extension of the status-quo (as these table games are currently in operation).

- Change in Gross State Product: +\$219 million
- Change in gaming taxes: -\$16 million
- Change in Compact revenues: +\$193 million
- Implications/considerations:
 - Revenue sharing agreement that is presently in place (per the Seminole Compact) would continue.
 - This scenario would effectively extend the status quo and, as such, would not address economic concerns expressed by pari-mutuel operators outside of Broward and Miami-Dade counties with respect to their ability/desire to have gaming operations.
- **Scenario B:** Granting the Seminole Tribe exclusive authorization to offer table games on Indian lands, as defined in the Indian Gaming Regulatory Act. No new casinos; however, the 344 table games currently operated by the Tribe are included in this scenario, as well as the addition of 74 table games that may include roulette and craps at five Seminole casinos (excluding the Tribe's Brighton and Big Cypress locations). This scenario depicts a 10.9 percent increase in statewide gaming positions over the baseline.

- **Scenario B**

- Change in employment: +1,865
- Change in Gross State Product: +\$272 million
- Change in gaming taxes: -\$16 million
- Change in Compact revenues: +\$205 million

- **Scenario B-1** *authorizes the end of live performances at pari-mutuel facilities (i.e., decoupling).*

- Change in employment: +1,441
- Change in Gross State Product: +\$264 million
- Change in gaming taxes: -\$16 million
- Change in Compact revenues: +\$205 million

- Implications/considerations:

- Granting table-games exclusivity to the Seminole casinos – with the addition of craps and roulette games – would result in additional revenue and, presumably, profit for the Seminole Tribe. The State of Florida may want to consider whether a more substantial revenue-sharing agreement is warranted for this privilege. However, the

numbers in this report are based on the revenue sharing agreement in the current Compact.

- Granting the Seminole Tribe table games exclusivity could widen the revenue gap between the Seminole casinos and the pari-mutuel casinos, creating deterioration of operating performance for the pari-mutuels. This could result in declining revenue and financial performance for the pari-mutuel operators, leading to lower capital reinvestment and less-attractive facilities.
- **Scenario C:** Regulating, prohibiting, restricting and/or taxing simulated casino-style gambling at Internet sweepstakes cafes, arcade amusement centers or truck stops. This scenario was subsequently modified to discuss the economic implications of the prohibition of these types of casino-style gambling. Therefore, Spectrum did not forecast the economic/fiscal impacts.
- **Scenario D:** Modifying or repealing live racing requirements for pari-mutuel facilities, including evaluation of impacts on purses and award for all forms of pari-mutuel activity. Because this scenario does not directly involve gaming, Spectrum did not forecast the economic/fiscal impacts.
 - Implications/considerations: Modifying or repealing live racing requirements would not impact revenue sharing per the Seminole Compact. We also see no impact on cardroom and/or slot revenue, as operators have indicated that they see, little if any, crossover play from gamblers who wager on pari-mutuels. Several facilities would cease live performances and the numbers of live events at other tracks could decrease. Breeders, trainers, jockeys and players would be impacted by any reductions in the number of live performances.
- **Scenario E:** Changing tax rates for Class III games at pari-mutuel facilities. Because this involves using rates other than the Florida pari-mutuel gaming tax rate, we could not provide economic/fiscal impacts under that budget. For impacts using other gaming tax rates, see figures 24 and 25 of Part 1B.
 - Implications/considerations:
 - Changing tax rates at pari-mutuels would not impact revenue sharing per the Seminole Compact.
 - If the State desires to grow, or at least maintain, its tax receipts from gaming facilities, the pari-mutuel operators must be in a position to market effectively and reinvest in their properties to keep them fresh and attractive to patrons. Properties that cannot spend adequately on marketing and facilities risk being caught in a vicious cycle that results in lower employment and tax receipts.

- Increasing tax rates on pari-mutuel slot revenues most likely would reduce operating margins at a time when the Seminole Tribe is expanding and improving its operations in South Florida. Increased tax receipts could offset potentially lower gaming revenues in the short run but could leave the pari-mutuel operators at a competitive disadvantage in the long run (or, at worst, could create a situation where one, or some, are no longer economically viable operations and potentially cease operations).
- Decreasing tax rates on pari-mutuel slot revenues could assist in protecting operating margins, allowing for greater marketing reinvestment and facilities improvements, leading to greater revenues. However, lowering the tax rate creates an additional risk for the State if operators view the lower taxes as a new revenue stream that can be invested outside of Florida. Any such consideration of a lower tax rate could include a commitment from operators to reinvest any additional funds in their Florida facilities.
- **Scenario F:** Adjusting restrictions on the number and operation of slot machines at pari-mutuel facilities in Miami-Dade and Broward counties. Spectrum did not provide economic/fiscal impacts under this scenario because it is unlikely to materially change the gaming landscape.
 - Implications/considerations:
 - Increasing the hours of operation and/or allowing existing pari-mutuels in Broward and Miami-Dade counties to have more than 2,000 slot machines would not impact revenue sharing per the Seminole Compact.
 - Increasing the maximum slot units per facility or amending the current regulations for the hours of operation – or both – will have no material positive impact on revenues and overall operating performance for existing pari-mutuels.
- **Scenario G:** Authorizing pari-mutuel facilities in counties other than Miami-Dade and Broward to offer slot machines. Per assumptions and modeling, there would be at least 18 additional casinos throughout Florida, located in 15 additional counties; while the total number of slots in Florida could more than double (i.e., an increase ranging from 18,300 to 25,700 slots).

- **Scenario G-1** has casino sizing restrictions in place for potential, new casino locations that are in close proximity to existing casinos as a mechanism to minimize cannibalization of GGR at existing casinos.
 - Change in employment: +16,119
 - Change in Gross State Product: +\$2.12 billion
 - Change in gaming taxes: +\$753 million
 - Change in Compact revenues: -\$121 million
- **Scenario G-2** does not include a mechanism to protect GGR at existing casinos, while each potential, new casino location could have up to 2,000 slots despite proximity to existing casino locations.
 - Change in employment: +20,147
 - Change in Gross State Product: +\$2.3 billion
 - Change in gaming taxes: +\$888 million
 - Change in Compact revenues: -\$121 million
- Implications/considerations:
 - All revenue sharing per the Seminole Compact would end.
 - Adopting this scenario could result in incremental increases in revenue due to the State, as well as incremental jobs and license fees, from development of casinos at pari-mutuel locations statewide.
 - The revenue generated by slot machines could provide a valuable funding source for improved racing facilities and racing purses, if operators were required to supplement purses, as demonstrated with the South Florida racinos and in other racino states.
 - The addition of slot machines may positively impact cardroom revenues, while the capital improvements required to add slot machines may require, or at least encourage, the track to simultaneously upgrade its cardroom, which could make it more popular with patrons.
 - The State may want to examine issues of saturation in certain areas throughout Florida, as some existing casino operators could face revenue declines, which could in turn lead to a deterioration of profitability and related operating margins.
 - Having gaming facilities throughout the state could impact Florida's family-friendly image in that travelers could be continually exposed

to advertisements and other marketing materials for one or more slots locations.

- The scale of such expansion would add logistical concerns regarding the need for, and cost of, regulation because the gaming facilities would be so widely dispersed.
 - Adding up to 20 additional casino locations throughout Florida would represent an unprecedented casino expansion in the United States. Once this action is taken, it will be difficult to unscramble the egg.
- **Scenario H:** Authorizing pari-mutuel facilities to conduct table games or other Class III games. If limited to pari-mutuels in Broward and Miami-Dade counties there would be no new casinos in Florida; however, the number of table games statewide increases by 681 (17.8 percent increase in statewide gaming positions). However, if expansion were to occur at pari-mutuels outside of Broward and Miami-Dade counties, per assumptions/modeling, there would be at least 18 additional casinos throughout Florida, located in 15 additional counties; while the total number of gaming positions in Florida could more than double (i.e., an increase ranging from 25,326 to 33,822 gaming positions).
 - **Scenario H-1** applies to the existing pari-mutuels in Broward and Miami-Dade counties only (i.e., no expansion of gaming to pari-mutuels outside of these two counties).
 - Change in employment: +3,403
 - Change in Gross State Product: +\$334 million
 - Change in gaming taxes: +\$44 million
 - Change in Compact revenues: +\$28 million
 - **Scenario H-2** applies to the existing pari-mutuels in Broward and Miami-Dade counties only and each would be permitted to end live performances (i.e., decoupling).
 - Change in employment: +2,975
 - Change in Gross State Product: +\$326 million
 - Change in gaming taxes: +\$44 million
 - Change in Compact revenues: +\$28 million
 - **Scenario H-3** applies to all pari-mutuels statewide (up to 28 locations) and includes casino sizing restrictions for potential, new casino locations that are in close proximity to existing casinos as a mechanism to minimize cannibalization of GGR at existing casinos.

- Change in employment: +21,832
- Change in Gross State Product: +\$2.58 billion
- Change in gaming taxes: +\$933 million
- Change in Compact revenues: -\$121 million
- **Scenario H-4** applies to all pari-mutuels statewide (up to 28 locations) and does not include a mechanism to protect GGR at existing casinos.
 - Change in employment: +27,018
 - Change in Gross State Product: +\$2.83 billion
 - Change in gaming taxes: +\$1.08 billion
 - Change in Compact revenues: -\$121 million
- Implications/considerations:
 - Revenue sharing per the Seminole Compact would be impacted, as follows:
 - If only Broward/Miami-Dade pari-mutuel locations offered table games, the Seminole Tribe would be relieved of the minimum revenue share payment and would also be entitled to a reduction in the amount of 50 percent of the decline in revenues from its Broward County facilities, comparing the year before the new gaming began with the 12 months after such new gaming commenced. Although the Seminole Tribe would also be released from making the guaranteed minimum payments, it would still be obligated to make payments based on the percentage revenue sharing schedule. If this provision were triggered, the Seminole Tribe would receive the relief described until the revenues once again exceed the base year, at which point the reduction would be eliminated.
 - If any or all of the 20 pari-mutuel locations outside of Broward and Miami-Dade counties offered slots and/or table games all revenue sharing per the Seminole Compact would end. The scale of such expansion would add logistical concerns regarding the cost of regulation because the gaming facilities would be so widely dispersed.
 - A critical element in authorizing table games would be the tax rate on table-games revenue. Jurisdictions that have set a high tax rate on slot revenue, such as Delaware and Pennsylvania, have established lower

rates on table games because of the significantly higher labor costs involved.

- The revenue generated by slot machines could provide a valuable funding source for improved racing facilities and racing purses, if operators were required to supplement purses, as demonstrated with the South Florida racinos and in other racino states. This could in turn enable the host pari-mutuel facilities to attract more and higher-quality horses and jockeys (and greyhounds), which would flow through to benefit trainers and breeders. However – as results in other racino states have shown – a higher-quality racing product does not necessarily translate into higher handle/increased popularity for the racing industry, as this activity is in decline nationwide.
 - The addition of slot machines may positively impact cardroom revenues. The cardrooms may also benefit from crossover between poker players and blackjack players. While most poker players do not cross over to other casino games, they may travel with spouses or other adults who do play casino games, and might be expected to spend money in non-gaming areas, such as hotels, dining and entertainment. The opposite phenomena also holds true, where casino-centric (or slots and/or table games) customers may travel with spouses or other adults who do play poker – and this can serve to increase cardroom revenue.
 - The capital improvements required to add slot machines and table games may require, or at least encourage, the host racetrack to simultaneously upgrade its cardroom, which could make it more popular with patrons.
 - The scale of such expansion would add logistical concerns regarding the need for, and cost of, regulation due to oversight of table games operations at existing pari-mutuel locations in Broward and Miami-Dade counties or in combination with the oversight of both slots and table games at up to 20 additional locations that would be widely dispersed statewide.
- **Scenario I:** Authorizing a limited number (two) of casino/resort complexes in Miami-Dade and/or Broward counties (and the remainder of the Florida casino landscape reflects current law/current administration, albeit with the addition of table games that may include roulette and craps games at all seven Seminole casinos). While casinos would not expand into any additional counties, per assumptions and modeling, the number of statewide gaming positions would increase by 55 percent (an increase of 7,600 slots and 831 table games).

○ **Scenario I**

- Change in employment: +14,050
- Change in Gross State Product: +\$1.86 billion
- Change in gaming taxes: +\$365 million
- Change in Compact revenues: +\$20 million

○ **Scenario I-1** allows for the end live performances at existing pari-mutuels with slots (i.e., decoupling).

- Change in employment: +13,622
- Change in Gross State Product: +\$1.85 billion
- Change in gaming taxes: +\$365 million
- Change in Compact revenues: +\$20 million

○ Implications/considerations:

- Revenue sharing per the Seminole Compact would be impacted, as it would exclude net win generated at the Seminole Tribe's Broward County facilities.
- Destination resort gaming restricted to Broward and Miami-Dade could provide a desirable combination of economic benefits via expansion while minimizing the negative consequences because gaming already is prominent in South Florida – such destination resorts could:
 - Place Florida in the major leagues of casino gambling, and the state could be transformed into a major international competitor for the ultra-high-end traveler who includes casino gambling as part of his/her entertainment experience. In this regard, Florida could compete with Las Vegas, Macau and other world-class casino markets for the highest-stakes players (dependent on the quality, location and marketing of the destination resorts).
 - Leverage the existing natural resources (ocean and beaches) and the state's considerable tourism infrastructure.
- The location and breadth of non-gaming amenities in such destination resorts, however, could pose threats to existing restaurants, hotels and entertainment options – particularly if the resorts failed to attract incremental out-of-market visitors.

- Destination resorts could threaten existing pari-mutuel slot operations. Although the current pari-mutuel slot patrons are viewed as neighborhood-loyal and convenience-driven in terms of choosing “their” place to participate in gaming activities, the impact of authorizing two destination resorts in Miami-Dade and/or Broward counties could negatively impact pari-mutuel slot operations dependent on their physical location and relative attractiveness with respect to the local population. The opportunity for a higher-quality gaming facility – along with the opportunity to earn player rewards such as hotel stays, gourmet meals and show tickets – could be an incentive influencing the switching behavior of some patrons.
- Destination resorts could be an immediate competitive threat to the Seminole-owned casinos, which could result in those properties lowering their costs, potentially providing a lesser experience for their patrons – both locals and prospective visitors. However, it also could prompt these properties to further improve/expand their offerings to compete with the destination resorts. Such responses by the Seminole casinos, however, also could place further pressure on the existing pari-mutuels.
- Adding destination resort gambling could change visitor perceptions regarding Florida’s family-friendly image.
- Such expansion would increase the need for, and cost of, regulation, as these two additional casinos would add 7,600 slots and 400 table games to Florida’s commercial casino landscape.
- **Scenario J:** Authorizing a limited number (six) of casino/resort complexes throughout the state – one in each of the following counties: Broward, Duval, Hillsborough, Miami-Dade, Orange, and Palm Beach. The remainder of the Florida casino landscape reflects current law/current administration, albeit with the addition of table games that may include roulette and craps games at all seven Seminole casinos. Per assumptions and modeling, there would be at least six additional casinos throughout Florida, located in three additional counties; while the total number of gaming positions in Florida would increase by 142 percent (an increase of 22,800 slots and 1,631 table games).
 - Change in employment: +38,372
 - Change in Gross State Product: +\$5.34 billion
 - Change in gaming taxes: +\$1.37 billion
 - Change in Compact revenues: -\$121 million

- Implications/considerations:
 - All revenue sharing per the Seminole Compact would end.
 - All of the Implications and Considerations in Scenario I (excluding revenue sharing impact) also apply to this Scenario, as well the following:
 - As noted in Spectrum’s first report, many business leaders in the Orlando area fear that any quantifiable revenue gains to the State by placing a casino in that region could have significant ramifications for Orlando’s family-friendly brand, which could reduce or negate any of those financial gains. While there is no reliable way to quantify such concerns, we suggest they have significant validity.
 - Such expansion would increase the need for, and cost of, regulation, as the addition of six destination resorts would add 22,800 slots and 1,200 table games to Florida’s commercial casino landscape. Additionally, three of the destination resorts would be widely dispersed statewide (i.e., in areas where there are currently no existing commercial casinos, outside of southeastern Florida).
 - If destination casino resorts were built and allowed to operate cardrooms, they may compete against the cardrooms at pari-mutuels. While the destination resorts may present a competitive threat to the pari-mutuel cardrooms, they may also grow the market by attracting poker players from farther away or those who are currently not attracted to existing cardrooms at existing pari-mutuel locations.
 - Destination resorts could threaten existing pari-mutuel slot operations. Although the current pari-mutuel slot patrons are viewed as neighborhood-loyal and convenience-driven in terms of choosing “their” place to participate in gaming activities, the impact of authorizing destination resorts could negatively impact pari-mutuel slot operations dependent on their physical location and relative attractiveness with respect to the local population. The opportunity for a higher-quality gaming facility – along with the opportunity to earn player rewards such as hotel stays, gourmet meals and show tickets – could be an incentive influencing the switching behavior of some patrons.

- **Scenario K:** Authorizing a limited number (two) of casino/resort complexes in Miami-Dade and/or Broward counties and authorizing pari-mutuel facilities in Miami-Dade and Broward counties to conduct table games or other Class III games (and the addition of table games that may include roulette and craps at all seven Seminole casinos). While casinos would not expand into any additional counties, per assumptions and modeling, the number of statewide gaming positions would increase by 61 percent (an increase of 7,600 slots and 1,081 table games).
 - Change in employment: +13,889
 - Change in Gross State Product: +\$1.81 billion
 - Change in gaming taxes: +\$398 million
 - Change in Compact revenues: +\$20 million
 - Implications/considerations:
 - Revenue sharing per the Seminole Compact would be impacted, as it would exclude net win generated at the Seminole Tribe's Broward county facilities.
 - This scenario includes full-blown casino gambling in South Florida (with the potential for 10 full-service casinos in the market), as such, there would be the opportunity to market South Florida as a gambling destination, one that could compete with Las Vegas and other fly-in gambling markets. Such marketing, however, could be at odds with existing Florida branding, and the family-friendly tourism promotions that dominate advertising and marketing statewide.
 - A key issue would be tax parity: Would the destination resorts pay the same tax on GGR as the pari-mutuels would on their slot and table revenue? If not, there could be a competitive and potentially unfair imbalance; if so, the pari-mutuels may be encouraged to make substantial capital improvements to compete with the new destination resorts, which could result in significant gains in construction and permanent operational jobs.
 - The Seminole casinos would retain their ability to compete effectively with all gaming entrants in the marketplace.
 - Such expansion would increase the need for, and cost of, regulation due to the addition of table games operations at existing pari-mutuel locations with slots in combination with the need to regulate two destination resorts that would add a total of 7,600 slots and 400 table games to Florida's commercial casino landscape.

- Destination resorts could threaten existing pari-mutuel slot operations, as well as the potential table games operations at these locations. Although the current pari-mutuel slot patrons are viewed as neighborhood-loyal and convenience-driven in terms of choosing “their” place to participate in gaming activities, the impact of authorizing destination resorts could negatively impact pari-mutuel slot and table games operations dependent on their physical location and relative attractiveness with respect to the local population. The opportunity for a higher-quality gaming facility – along with the opportunity to earn player rewards such as hotel stays, gourmet meals and show tickets – could be an incentive influencing the switching behavior of some patrons.
- **Scenario L:** Authorizing a limited number (six) of casino/resort complexes around the State and authorizing all pari-mutuel facilities statewide (up to 28) to offer both slots and table games or other Class III games. Additionally, this scenario allows for the end of live performances at pari-mutuels (i.e., decoupling) and includes the addition of table games that may include roulette and craps at all seven Seminole casinos. Per assumptions and modeling, there would be at least 17 additional casinos throughout Florida, located in 13 additional counties; while the total number of gaming positions in Florida could nearly triple (i.e., an increase ranging from 43,172 to 44,824 gaming positions [from the addition of 30,500 to 31,900 slots and 2,112 to 2,154 table games]).
 - *Scenario L-1 includes casino sizing restrictions for potential, new pari-mutuel casino locations that are in close proximity to existing casinos as a mechanism to minimize cannibalization of GGR at existing casinos.*
 - Change in employment: +47,799
 - Change in Gross State Product: +\$6.39 billion
 - Change in gaming taxes: +\$1.67 billion
 - Change in Compact revenues: -\$121 million
 - *Scenario L-2 does not include a mechanism to protect GGR at existing casinos, while each potential, new pari-mutuel casino location could have up to 2,000 slots and 60 table games despite proximity to existing casino locations.*
 - Change in employment: +48,605
 - Change in Gross State Product: +\$6.42 billion
 - Change in gaming taxes: +\$1.69 billion

- Change in Compact revenues: -\$121 million
- Implications/considerations:
 - All revenue sharing per the Seminole Compact would end.
 - This is effectively a “wide-open” scenario that could result in Florida having more casinos than all but five states, as such:
 - Florida could have up to 42 casino locations, while there could be saturation in certain markets and the viability of some prospective operations would be in doubt (although we project eight of these locations would not be economically viable).
 - The presence of so many casinos would make them highly visible throughout the state and potentially change the perception of Florida among some visitors. Tourism-related agencies and groups would need to consider whether to include casinos as part of their marketing campaigns.
 - The State would need to address the regulatory structure to effectively regulate up to 34 commercial casinos. The scale of such expansion would add logistical concerns regarding the cost of regulation because the gaming facilities would be so widely dispersed.
 - The revenue generated by slot machines and table games statewide could provide a valuable funding source for racing purses and improved racing facilities, as demonstrated with the South Florida racinos and in other racino states. This could in turn enable the host pari-mutuel facilities to attract more and higher-quality horses and jockeys (and greyhounds), which would flow through to benefit trainers and breeders. However – as results in other racino states have shown – a higher-quality racing product does not necessarily translate into higher handle/increased popularity for the racing industry, as this activity is in decline nationwide.
 - If destination casino resorts were built and allowed to operate cardrooms, they may compete against the cardrooms at pari-mutuels – whether the pari-mutuels have slots and tables or not. While the destination resorts may present a competitive threat to the pari-mutuel cardrooms, they may also grow the market by attracting poker players from farther away or those who are currently not attracted to existing cardrooms at existing pari-mutuel locations.

- The addition of slot machines may positively impact cardroom revenues. The cardrooms may also benefit from crossover between poker players and blackjack players. While most poker players do not cross over to other casino games, they may travel with spouses or other adults who do play casino games, and might be expected to spend money in non-gaming areas. The capital improvements required to add slot machines and table games may require, or at least encourage, the host racetrack to simultaneously upgrade its cardroom, which could make it more popular with patrons.
- Destination resorts could threaten existing and/or new pari-mutuel slot and table games operations. Although the current pari-mutuel slot patrons are viewed as neighborhood-loyal and convenience-driven in terms of choosing “their” place to participate in gaming activities, the impact of authorizing destination resorts could negatively impact pari-mutuel slot and table games operations dependent on their physical location and relative attractiveness with respect to the local population. The opportunity for a higher-quality gaming facility – along with the opportunity to earn player rewards such as hotel stays, gourmet meals and show tickets – could be an incentive influencing the switching behavior of some patrons.
- A key issue would be tax parity: Would the destination resorts pay the same tax on GGR as the pari-mutuels would on their slot and table revenue? If not, there could be a competitive and potentially unfair imbalance; if so, the pari-mutuels may be encouraged to make substantial capital improvements to compete with the new destination resorts, which could result in significant gains in construction and permanent operational jobs.
- The Seminole casinos would retain their ability to compete effectively with all gaming entrants in the marketplace.
- Such expansion would increase the need for, and cost of, regulation due to the addition of table games operations at existing pari-mutuel locations in Broward and Miami-Dade counties coupled with the oversight of both slots and table games at up to 20 additional locations that would be widely dispersed statewide. Additionally, there would be six destination resorts that would add 22,800 slots and 1,200 table games to Florida’s commercial casino landscape, while three of the destination resorts would be widely dispersed statewide (i.e., in areas where there are currently no existing commercial casinos, outside of southeastern Florida).

Our economic/fiscal analyses omit two of the listed scenarios: C, because gambling in non-casinos is prohibited; and D, because modifying or repealing live-racing requirements does not impact the analysis of gaming facilities.

Spectrum principally relied on gravity modeling to develop GGR projections and related metrics under each gaming-related scenario. We developed assumptions based on Florida data, national data, our research for this report, and Spectrum's experience in analyzing gaming markets. Different assumptions can lead to different conclusions. It is critical to understand the assumptions used in this report; they are provided in Part 2, Chapter II – "Assumptions, Methodologies and Considerations."

The following table summarizes our projections by scenario for those that relate to legalized gaming:

\$M, current \$ / Scenario:	Baseline	A / E	B	G-1	G-2	H-1 / H-2	H-3	H-4
# Pari-mutuel Casinos	8	8	8	26	26	8	26	26
# Native American Casinos	8	8	8	8	8	8	8	8
# Destination Resorts	0	0	0	0	0	0	0	0
Grand Total # Casinos	16	16	16	34	34	16	34	34
# FL Counties w/ Casino	6	6	6	21	21	6	21	21
# Slots	22,973	22,973	22,973	41,273	48,673	22,973	40,973	48,173
# Table Games	0	344	418	344	344	681	1,221	1,437
# Positions	22,973	25,037	25,481	43,337	50,737	27,059	48,299	56,795
GGR / Position / Day (Actual\$)	\$293	\$292	\$293	\$264	\$224	\$284	\$253	\$215
Slot Win	\$2,455.7	\$2,301.2	\$2,297.5	\$3,853.6	\$3,884.8	\$2,277.0	\$3,701.8	\$3,723.6
Table Win	\$0.0	\$368.8	\$427.6	\$325.2	\$259.3	\$531.1	\$763.8	\$742.0
GGR	\$2,455.7	\$2,670.0	\$2,725.1	\$4,178.7	\$4,144.1	\$2,808.0	\$4,465.5	\$4,465.5
" " In-State	\$2,287.0	\$2,490.5	\$2,542.9	\$3,878.1	\$3,845.2	\$2,621.6	\$4,144.3	\$4,144.3
" " Out-of-State	\$168.8	\$179.5	\$182.2	\$300.6	\$298.9	\$186.4	\$321.3	\$321.3
Net GGR Rev. (Taxable)	\$583.6	\$547.0	\$547.0	\$2,110.8	\$2,389.4	\$668.4	\$2,476.9	\$2,787.7
Tax \$ (at 35%)	\$204.3	\$191.4	\$191.4	\$738.8	\$836.3	\$233.9	\$866.9	\$975.7
Tax \$ (at 27%) US Median	\$157.6	\$147.7	\$147.7	\$569.9	\$645.1	\$180.5	\$668.8	\$752.7
Tax \$ (at 54%/12%) PA Model	\$315.1	\$295.4	\$295.4	\$1,139.8	\$1,290.3	\$314.5	\$1,164.5	\$1,310.5
\$M, current \$ / Scenario:	Baseline	I	J	K	L-1	L-2		
# Pari-mutuel Casinos	8	8	8	8	19	19		
# Native American Casinos	8	8	8	8	8	8		
# Destination Resorts	0	2	6	2	6	6		
Grand Total # Casinos	16	18	22	18	33	33		
# FL Counties w/ Casino	6	6	9	6	19	19		
# Slots	22,973	30,573	45,773	30,573	53,473	54,873		
# Table Games	0	831	1,631	1,081	2,112	2,154		
# Positions	22,973	35,559	55,559	37,059	66,145	67,797		
GGR / Position / Day (Actual\$)	\$293	\$246	\$236	\$239	\$224	\$218		
Slot Win	\$2,455.7	\$2,580.6	\$3,764.0	\$2,562.3	\$4,247.4	\$4,253.9		
Table Win	\$0.0	\$614.4	\$1,018.8	\$677.0	\$1,150.2	\$1,143.7		
GGR	\$2,455.7	\$3,195.0	\$4,782.8	\$3,239.3	\$5,397.6	\$5,397.6		
" " In-State	\$2,287.0	\$2,965.1	\$3,847.4	\$2,838.3	\$4,387.3	\$4,387.3		
" " Out-of-State	\$168.8	\$229.9	\$935.4	\$401.0	\$1,010.4	\$1,010.4		
Net GGR Rev. (Taxable)	\$583.6	\$1,326.3	\$3,390.3	\$1,394.5	\$3,994.9	\$4,028.7		
Tax \$ (at 35%)	\$204.3	\$464.2	\$1,186.6	\$488.1	\$1,398.2	\$1,410.0		
Tax \$ (at 27%) US Median	\$157.6	\$358.1	\$915.4	\$376.5	\$1,078.6	\$1,087.7		
Tax \$ (at 54%/12%) PA Model	\$315.1	\$609.8	\$1,495.9	\$618.4	\$1,763.6	\$1,781.2		

Source: Spectrum Gaming Group. **Notes:** Scenarios H-1 and H-2 have pari-mutuel operators limited to Miami-Dade and Broward counties, whereas Scenarios H-3 and H-4 have pari-mutuel operators statewide. Scenarios G-1, H-3, and L-1 reflect results with location/sizing constraints imposed to minimize cannibalization of existing operators.

Working with project partner REMI, Spectrum then projected the economic impacts of the gaming scenarios noted above compared to the Baseline scenario (as applicable). Scenario F had no estimated changes in employment or GGR relative to the Baseline scenario and thus no quantifiable change. REMI's Tax-PI model was used to examine four different budget conditions:

1. That labeled *Default Budget* was that provided by the State of Florida Office of Economic and Demographic Research.
2. That labeled *Florida pari-mutuel gaming tax* reflects all casino gambling taxed at Florida's prevailing pari-mutuel slots rates: 35 percent.
3. That labeled *US median gaming tax rate* reflects all casino gambling taxed at national median rates: 27 percent.
4. That labeled *Pennsylvania gaming tax rates* reflects all casino gambling in Florida taxed using the rates prevailing in Pennsylvania: 54 percent for slots and 12 percent for table games.

The Default Budget and the Pari-Mutuel Rates budget are methodologically equivalent, thus results are shown for three different budget assumptions.

The values for Year 10 of the baseline forecast for employment, Gross State Product and tax revenues are as follows (please see Figure 5, Part 1B, for an explanation of each impact category):

Baseline – Year 10	At Default/Florida Pari-Mutuel Gaming Tax Rate	At US Median Gaming Tax Rate	At Pennsylvania Gaming Tax Rates
Employment	11,453,282	11,452,546	11,455,032
Gross State Product	\$1,466,181	\$1,466,107	\$1,466,354
Gaming Taxes	\$312	\$246	\$467
Sales/Use Tax	\$35,850	\$35,848	\$35,854
Lottery	\$1,999	\$1,999	\$1,999
Compact Revenues	\$121	\$121	\$121
All other Revenues	\$56,049	\$56,048	\$56,052

Source: Spectrum Gaming Group, Regional Economic Models Inc. Jobs in units, \$ in nominal millions. Revenues in FY.

Next, we look at the economic/fiscal impacts by scenario using the Default Budget and at two different gaming-tax levels. The results are incremental to the Baseline Level. The first table (following page) shows the economic/fiscal impacts of each scenario that does not involve a combination of expansion scenarios.

Year 10 change by scenario, as compared to Baseline Level ⁶									
At Default Budget/Florida Pari-Mutuel Gaming Tax Rate	A	B	G-1	G-2	H-1	H-3	H-4	I	J
Employment	1,581	1,865	16,119	20,147	3,403	21,832	27,018	14,050	38,372
Gross State Product	\$227	\$272	\$2,118	\$2,303	\$334	\$2,585	\$2,829	\$1,861	\$5,345
Gaming Taxes	(\$16)	(\$16)	\$753	\$888	\$44	\$933	\$1,084	\$365	\$1,374
Sales/Use Tax	\$4	\$5	\$36	\$45	\$7	\$49	\$60	\$31	\$87
Lottery	(\$10)	(\$11)	\$1	\$1	(\$3)	(\$0)	\$0	(\$4)	(\$3)
Compact Revenues	\$193	\$205	(\$121)	(\$121)	\$28	(\$121)	(\$121)	\$20	(\$121)
All other Revenues	\$3	\$4	\$38	\$46	\$6	\$50	\$60	\$27	\$78
At US Median Gaming Tax Rate			G-1	G-2	H-1	H-3	H-4	I	J
Employment			16,712	20,845	3,428	22,569	27,946	14,224	39,965
Gross State Product			\$2,216	\$2,419	\$339	\$2,707	\$2,977	\$1,896	\$5,568
Gaming Taxes			\$582	\$686	\$34	\$721	\$843	\$281	\$1,127
Sales/Use Tax			\$36	\$45	\$7	\$49	\$60	\$31	\$88
Lottery			\$6	\$7	(\$2)	\$6	\$8	(\$1)	\$6
Compact Revenues			(\$121)	(\$121)	\$28	(\$121)	(\$121)	\$20	(\$121)
All other Revenues			\$38	\$46	\$6	\$50	\$60	\$27	\$78
At Pennsylvania Gaming Tax Rates			G-1	G-2	H-1	H-3	H-4	I	J
Employment			14,810	18,583	3,577	21,036	26,045	14,001	37,929
Gross State Product			\$1,897	\$2,042	\$362	\$2,448	\$2,663	\$1,848	\$5,247
Gaming Taxes			\$1,159	\$1,367	\$4	\$1,199	\$1,401	\$417	\$1,660
Sales/Use Tax			\$36	\$45	\$7	\$49	\$60	\$32	\$88
Lottery			(\$11)	(\$13)	(\$1)	(\$8)	(\$9)	(\$5)	(\$11)
Compact Revenues			(\$121)	(\$121)	\$28	(\$121)	(\$121)	\$20	(\$121)
All other Revenues			\$39	\$47	\$6	\$50	\$60	\$28	\$79

Source: Spectrum Gaming Group, Regional Economic Models Inc. Jobs in units, \$ in nominal millions (rounded). Revenues in FY.

⁶ Per agreement with the Legislature, Scenarios A and B are analyzed only under the Default/Pari-Mutuel Rates Budget.

The next table shows the economic/fiscal impacts of each scenario that involves a combination of expansions scenarios.

Year 10 change by combination scenario, as compared to Baseline Level ⁷							
At Default Budget/Florida Pari-Mutuel Gaming Tax Rate	A-1	B-1	H-2	I-1	K	L-1	L-2
Employment	1,154	1,441	2,975	13,622	13,889	47,799	48,605
Gross State Product	\$219	\$264	\$326	\$1,853	\$1,806	\$6,388	\$6,419
Gaming Taxes	(\$16)	(\$16)	\$44	\$365	\$398	\$1,672	\$1,689
Sales/Use Tax	\$3	\$4	\$6	\$30	\$34	\$107	\$109
Lottery	(\$10)	(\$11)	(\$3)	(\$4)	(\$4)	(\$4)	(\$4)
Compact Revenues	\$193	\$205	\$28	\$20	\$20	(\$121)	(\$121)
All other Revenues	\$3	\$3	\$5	\$27	\$33	\$99	\$101
At US Median Gaming Tax Rate			H-2	I-1	K	L-1	L-2
Employment			3,000	13,794	14,076	50,345	51,213
Gross State Product			\$331	\$1,887	\$1,843	\$6,721	\$6,759
Gaming Taxes			\$34	\$281	\$307	\$1,420	\$1,436
Sales/Use Tax			\$6	\$30	\$34	\$110	\$112
Lottery			(\$2)	(\$1)	(\$2)	\$7	\$7
Compact Revenues			\$28	\$20	\$20	(\$121)	(\$121)
All other Revenues			\$5	\$27	\$33	\$101	\$103
At Pennsylvania Gaming Tax Rates			H-2	I-1	K	L-1	L-2
Employment			3,148	13,572	13,891	47,227	46,468
Gross State Product			\$353	\$1,839	\$1,801	\$6,262	\$6,135
Gaming Taxes			\$3	\$417	\$430	\$2,039	\$2,068
Sales/Use Tax			\$6	\$31	\$34	\$109	\$109
Lottery			(\$1)	(\$5)	(\$5)	(\$15)	(\$12)
Compact Revenues			\$28	\$20	\$20	(\$121)	(\$121)
All other Revenues			\$5	\$27	\$33	\$101	\$102

Source: Spectrum Gaming Group, Regional Economic Models Inc. Jobs in units, \$ in nominal millions. Revenues is fiscal years.

Spectrum and REMI also used information from a comprehensive consumer survey conducted by the University of Florida for this study to produce estimates of the economic impacts of changes in visitors. Section A (see Chapter IV) describes the impact of current visitors extending their stay due to the presence of expanded gaming opportunities. Section B describes the impact of the increase in Florida-based gambling by residents who currently gamble out of state or at a Native American casino. Section C describes the impact of the increase in Florida-based gambling by residents who currently do not gamble but would if

⁷ Per agreement with the Legislature, Scenarios A-1 and B-1 are only analyzed under the Default/Pari-Mutuel Rates Budget.

additional activities were available. Section D describes the impact of the increase in visitors to Florida rather than an alternative destination due to the availability of gaming. Section E describes the impact of the decrease in visitors to Florida due to the availability of gaming.

The following table summarizes the economic impacts for each section described above:

At Default Budget/ Florida Pari-Mutuel Gaming Tax Rate – Year 10 Change	A	B	C	D	E
Employment	38,851	11,651	313	117,608	-6,905
Gross State Product	\$5,868	\$1,549	\$70	\$11,868	(\$696)
Gaming Taxes	\$33	\$7	\$1	\$25	(\$1)
Sales/Use Tax	\$85	\$25	\$1	\$245	(\$14)
Lottery	\$3	\$1	(\$0)	\$6	(\$0)
Compact Revenues	\$0	\$0	\$0	\$0	\$0
All other Revenues	\$94	\$27	\$1	\$258	(\$15)

Source: Spectrum Gaming Group, Regional Economic Models Inc., University of Florida. Dollars in nominal millions. Revenues in fiscal years (FY).

Social

The body of scientific research focusing on the consequences of gambling expansion is relatively limited by both its size and methodological quality. Upon systematic examination, the research fails to demonstrate that gambling expansion has changed the prevalence of gambling-related problems. Nevertheless, before we can draw a confident conclusion about the epidemiological consequences of gambling expansion, the implication of having a small body of methodologically weak research is the need to conduct high-quality prospective longitudinal studies to clarify the impact of expanded gambling upon the public health and welfare. Such a study would demonstrate the number of new cases of gambling disorder, the course of such problems, and the distribution of these problems based upon exposure to expansion.

With that in mind, we need to be mindful of two primary possibilities:

- Gambling expansion is related to the emergence and development of gambling-related problems as the conventional wisdom suggests.
- Gambling-exposed settings have adapted to the influence of gambling by developing sufficient immunity and resilience to gambling that gambling expansion has little impact on the public health and welfare.

In this report, we note that the identification of a specific social cost of gambling expansion is entirely dependent upon the operational definition of social cost. Unfortunately, to date, the economic experts in this area have not come to an agreement about a gold standard for defining social cost. In fact, the extent of expert disagreement in this area of research is quite profound. Disagreement among economic perspectives yields a broad range of social cost estimates. More specifically, for Florida, the range of economic estimates is, for the gross social costs based on past-year problem and disordered gambling, between \$258 million and \$823

million per year. For lifetime problem and disordered gambling, we estimate the social costs to be between \$373 million and \$1.19 billion per year, as seen in the following table:

Gross Annual Social Cost Estimates for Florida Past-Year Prevalence Estimates			
Definition	Pathological Gamblers	Problem Gamblers	Total Estimated Cost
Economics	\$172,351,000	\$ 86,156,000	\$258,507,000
Economics + transfers	\$390,717,000	\$195,397,000	\$586,114,000
Economics + transfers + internalized costs	\$548,754,000	\$274,309,000	\$823,063,000
Gross Annual Social Cost Estimates for Florida Lifetime Prevalence Estimates			
Economics	\$287,252,000	\$ 86,156,000	\$ 373,408,000
Economics + transfers	\$651,195,000	\$195,397,000	\$ 846,592,000
Economics + transfers + internalized costs	\$914,494,000	\$274,309,000	\$1,188,803,000

Source: Spectrum Gaming Group summary. All amounts are rounded to the nearest \$1,000.

Florida is already exposed to a considerable array of gambling opportunities and access. The scientific literature suggests that gambling expansion will not automatically translate into an enduring set of expanded gambling problems for mature gambling jurisdictions. This is especially true for areas that already have a meaningful amount of gambling opportunities available to its residents – such as Florida. This means that the expansion scenarios Florida is considering, from minimal to maximal, probably will not have as diverse or as robust an impact as they could within a less-gambling-exposed jurisdiction.

REMI used the estimate of social costs to run a simulation that focuses on capturing their economic impacts on the State of Florida. These costs were modeled by reducing the amenity value of Florida. This methodology is used to capture non-pecuniary aspects that can generally be described as quality of life and results in fewer in-migrants to the state.

At Default Budget/ Florida Pari-Mutuel Gaming Tax Rate	Year 10
Employment	-1,186
Gross State Product	(\$126)
Gaming Taxes	(\$0)
Sales/Use Tax	(\$6)
Lottery	\$1
Compact Revenues	\$0
All other Revenues	(\$11)

Source: Spectrum Gaming Group summary, Regional Economic Models Inc. Dollars in nominal millions. Revenues in FY.

Part 2 – Key Findings

Part 2 of the three-part study commissioned by the Florida Legislature focused on how the introduction or expansion of gaming impacts the host or nearby communities.

This report analyzes county-level data on employment, average weekly wages, and the number of establishments in operation, and offers projected impacts of casino expansion in selected Florida counties. The analysis utilizes previously published estimated casino impacts on

employment and wages, and estimated casino impacts on the number of establishments based on peer counties outside of Florida. Key points are as follows:

- The literature on the economic impacts of legalized casinos is mostly recent, with many studies published since the early 1990s. Many researchers and casino opponents have argued that casinos may “cannibalize” other industries, resulting in no net positive (or a negative) impact on employment and wages.
- Specific projections of the economic impacts of casinos have been mixed.
- The study by Cotti (2008) is the most comprehensive county-level study on the economic impacts of casinos. His estimated impacts on employment and wages are utilized in projecting impacts from prospective casinos in selected counties in this report.
- We collected data from the Bureau of Labor Statistics (Quarterly Census of Employment and Wages) on number of people employed, average weekly wages, and the number of establishments, at the county level, from 2002Q1 through 2012Q4.
- We analyze the potential impacts of introducing casinos in Broward, Hillsborough, Miami-Dade, and Orange counties, and project the number of jobs that would be created, on net, with the introduction of casinos, compared to if no casinos were introduced. The results suggest that, countywide, there is unlikely to be significant changes in overall employment and average wages with the introduction of casinos. However, there will be increases in employment and wages in the leisure and hospitality and “other services” sectors. The most likely reason the analysis concludes that the employment and wage impacts are insignificant is that research has shown that casino impacts are less noticeable in larger-population counties.
- Another finding is that the number of establishments in all industries (at the county level) is projected to increase with the introduction of casinos.
- Specific projections, in terms of number of jobs created, changes in average weekly wages, and changes in the number of establishments, are provided for three sectors: All Industries, Leisure & Hospitality, and Other Services. Estimated casino effects are:
 - All Industries: Number of establishments (+2.32 percent), No. employed (+0.28 percent), and average weekly wages (-0.12 percent)
 - Leisure & Hospitality: Number of establishments (+2.85 percent), No. employed (+3.61 percent), and average weekly wages (+2.28 percent)
 - Other Services: Number of establishments (+4.39 percent), No. employed (+2.03 percent), and average weekly wages (+3.36 percent)

- When we consider the employment and wage impacts of prospective pari-mutuel counties that add slot machines, our projections suggest that the effects are likely to be similar to a standalone casino (in percentage terms). Since most counties that currently host pari-mutuels have very large populations, the estimated employment and wage impacts (on All Industries) are minor.
- Taken together, along with state-level estimates provided by REMI, the results suggest that casinos would likely have a mildly positive economic impact on their local economies and the state economy. We find no evidence to support the contention that casinos dramatically “cannibalize” other industries. The fact that casinos will compete with other firms, and that there is no net effect on county-level employment, suggests that, on balance, casinos have a neutral impact on local labor markets.

The report notes caveats that should be considered when interpreting the results.

PART 1A

I. Introduction

The study of gambling's economic and social impacts is a never-ending process that will only grow more critical over time: Some form of gambling is legal in 48 states, and debates over gambling expansion seem to be an annual event at statehouses across the country. Moreover, the effective legalization of Internet gambling at the state level has magnified such debates. At the same time, illegal and/or unregulated gambling is proliferating through such channels as so-called Internet cafes, gray-market electronic gaming devices, skill games, amusement games, and online games.

A majority of American adults are gamblers. Some 53 percent played the lottery last year and 32 percent gambled in a casino.¹ As gambling historian David G. Schwartz notes, the activity is nearly as old as civilization itself. In America, colonial legislatures authorized 157 lotteries from the 1740s through 1776 to assist governments and other institutions.²

Legalized gambling as we know it today is relatively young. The first legal casinos of the modern era opened in Nevada in 1931. The country's first lottery, in New Hampshire, began in 1964. Betting on horse races has a longer history, dating to colonial days in America but grew rapidly after the Civil War.³

Although popular in one form or another, gambling remains controversial. On the one hand, regulated gambling can provide substantial revenues to governments and, in many markets, a substantial number of direct, indirect and induced jobs; on the other hand, it can lead to compulsions that result in financial, familial and mental-health costs, as well as governmental costs ranging from gambling-addiction treatment centers to additional law enforcement. The arguments on both sides are strong – and usually impassioned.

This report will not resolve the debate over the merits of legalized gambling, nor is it the assignment of Spectrum Gaming Group to attempt to do so (nor has the Florida Legislature tasked Spectrum with recommending any course of action). Rather, the Legislature commissioned an economic and academic study for the purpose of educating the state's policymakers so that they may make enlightened decisions regarding the future of gambling in their state.

¹ American Gaming Association, *2013 State of the States*, p. 25
http://www.americangaming.org/sites/default/files/uploads/docs/aga_sos2013_fnl.pdf.

² David G. Schwartz, *Roll The Bones: The History of Gambling*, p. 144.

³ *Ibid.*, p. 332.

This analysis relies on the experience of Spectrum professionals in various disciplines, many of whom have studied this issue for decades, and is supported by additional research and interviews with numerous stakeholders in Florida who care deeply about this issue, and about the future of their state. Our experience is tempered and governed by certain observations and principles:

- The gaming industry is uniquely intertwined with government, arguably as much as any other industry, particularly any industry that is dependent on discretionary spending. Government can legislate gaming into – or out of – existence, which underscores this relationship.
- Gaming is a privilege granted to those who meet affirmative obligations for demonstrating their good character, honesty and integrity. That principle is largely universal, and is shared by federal, state and tribal governments.
- Governments not only authorize legalized gambling, but often grant regional monopolies for operators. The corollary to that is that operators have a responsibility to operate in the public interest.
- With proper planning and coordination, the public and private sectors are more likely to identify common goals, and to achieve those goals.

Methodology

The State of Florida on April 16, 2013, retained Spectrum Gaming Group (“Spectrum,” “we” or “our”) to complete a two-party study of the state’s gambling industry, pursuant to Invitation to Negotiate #859 (“the ITN”).⁴ This report is Part 1, Section A: *Assessment of the Florida gaming industry and its economic effects*. Two additional reports as part of this engagement will be delivered by Spectrum to the Legislature on or before October 1, 2013: Part 1, Section B: *Assessment of potential changes and economic effects*; and Part 2: *Statistical relationships between gaming and economic variables for communities*.

Following is the assigned scope of this report, as published in the ITN:

A. Assessment of the Florida gaming industry and its economic effects.

1. An assessment of gambling generally, including:
 - a. A general description of gambling in terms of popularity, profitability, regulatory considerations, and cost mitigation, including not only industries currently operating in Florida but also other gambling activities such as table games, Internet poker, destination resort casinos, and sports betting.

⁴ See http://www.leg.state.fl.us/GamingStudy/docs/ITN_859_Invitation.pdf.

- b. A general description of gambling regulatory schemes, including: State-operated, consolidated agency oversight, multi-agency oversight, and the use of local and state commissions; Authorizing and revocation mechanisms; Taxation schemes.
 - c. A general description of trends and best practices in governance and regulation of gambling activities.
 - d. A general description of gambling as a public funding source, including: Comparison of states' reliance on and uses of gambling as a public funding source; Reliability and predictability of gambling revenues; Direct and indirect costs to the state.
 - e. A general description of gambling impacts, including: Social, criminal, and personal; Short- and long-term fiscal.
2. An economic assessment of the structure and performance of Florida's existing gaming industry, including:
 - a. An analysis of gaming subsectors and their size and economic importance.
 - b. A description of the direct, indirect, and induced components of the economic and fiscal impact of each of the subsectors. Impacts associated with facility construction should be distinguished from impacts associated with ongoing operation of a facility.
 - c. An assessment of the changes in those impacts over time until the present day, historically, and projections for the future.

In each section of the report, we provide the relevant ITN language (highlighted in gray) to provide an understanding of the scope of research with which Spectrum was tasked for this first report.

Our task was to study the impacts of legalized gambling. Like many other states, Florida had (and perhaps still has) illegal and/or unregulated gaming in the form of Internet cafes and slot-like arcade games. While we discuss the nature and issues involving such gambling, it is beyond the scope of this study to examine its performance and impacts.

Many of the topics covered herein are worthy of their own reports, but the broad, multi-subject scope of this report – and the directive of providing “an assessment of gambling generally” – limits the extent to which we could reasonably treat such topics. It is important to note, however, that in-depth analysis of several topics will be provided in the second and third reports of Spectrum's engagement. Further, our footnotes herein provide dozens of excellent document references – many available online, with the URLs included – where readers can find more information about these important topics.

Spectrum employed 16 project professionals for this report, all of whom are staff experts or associates, assisted by support staff as needed. We relied on publicly available data, as well as data requested from gambling operators and government sources, interviews with various Florida stakeholders (both in person, by telephone and by email), site visits, existing documents and research reports, and our collective expertise in having studied gambling for more than three decades.

For the second part of this report, which assesses the economic structure of Florida's existing gaming industry, we teamed with Regional Economic Models Inc., a globally respected economic modeling firm based in Amherst, MA, that works with numerous state governments, including the State of Florida. REMI's goal in this report was to establish, as best the data would allow, a baseline of the economic contributions of the existing gaming industry in Florida. To this end, REMI relied on its Tax-PI model, data from the US Census Bureau, and data from the other project team members. REMI used each source of data to compliment the others in order to produce the best picture the data would support. Once a base year was established, REMI used an index of the growth in the relevant industry sectors in Tax-PI to forecast growth for the gaming industry into the future. With this baseline established, REMI then conducted a counterfactual study that removed the existing gaming industry from the economy in order to calculate its contribution.

II. General Assessment of Gambling

A general description of gambling in terms of popularity, profitability, regulatory considerations, and cost mitigation, including not only industries currently operating in Florida but also other gambling activities such as table games, Internet poker, destination resort casinos, and sports betting.

Growth and Evolution of Gambling in United States

Florida is not an emerging gambling state. In terms of revenue, employment, number of gaming locations and other important measures, it already *is* a major gambling state, with a wide array of options. Florida is arguably a microcosm of US gaming, with all of the forces that are shaping the industry in other states at play here. Absent a plan for growth, these forces will continue unabated in shaping the industry in both Florida and elsewhere. Moreover, the presence of such forces will also constrict the ability of lawmakers to chart the future of gaming. These forces can be segmented into the following broad areas:

- **Legal:** Within the bounds of the state Constitution and federal law, the Florida Legislature has significant ability to craft its own laws and policies. The boundaries that limit legislative authority, however, are significant. Florida is bound by a Compact with the Seminole Tribe of Florida, and that Compact is, in turn, bound by federal laws and regulations, most notably by the Indian Gaming Regulatory Act (“IGRA”). Other states, such as Connecticut, have found themselves in a similar position, having learned that compacts can represent missed opportunities that are difficult to revise after the fact.
- **Market:** As with any gaming jurisdiction, the future size of the gaming industry will be partly dependent on the size of the resident population, as well as on the size of the existing and future tourism markets. Those markets will, in turn, be dependent on the number of gaming and other entertainment options, both inside and outside Florida. As gaming expands within the home markets of Florida visitors, as well as within markets that compete for those visits, it will impact the growth of gaming in Florida, as well as the ability of lawmakers to guide that growth.
- **Historic:** The two federally recognized tribes in Florida lay claim to a longstanding history of gaming in Florida, as well as other rights and privileges granted to sovereign governments. Historic claims to sovereignty are at the root of IGRA and various court decisions that have supported and bolstered the concept of sovereignty and gaming rights. At the same time, the pari-mutuel industry – in particular, horse racing – has a long history within the state as well, and extends into various geographic regions and economic interests, from breeding and training to racing. This factor is arguably more acute in Florida, but is not unprecedented.

- **Political:** Among various private industries, gaming is uniquely dependent on the political process for its success and, in many instances, for its very existence. In Florida, as in other states, this essential connection with government and the political process means that gaming operators and their allied interests have devoted – and will continue to devote – considerable resources toward influencing that process. At the same time, other interests that oppose the expansion of gaming, for reasons ranging from moral to economic, will play a role in that process.
- **Technological:** Gaming is hardly immune to changes in technology that are whipsawing many industries and changing business models around the world. The development of the Internet, and offshoots of that, including the expanded use of mobile technologies, have created new gaming opportunities, while presenting new challenges for lawmakers and regulators. In turn, as other states – and the federal government – adapt their own gaming laws, it will inevitably have an impact on the future of gaming in Florida.
- **Competitive:** While states compete against other states, in-state competition is also common. Lotteries and casinos can view each other as threats (even though arguably the experience is quite different, as is the demographics of the player base) or as substitutes. Similarly, within the casino sub-sector itself, in-state competition can occur, and that can include competition for legislative and regulatory attention and resources. In Indiana, for example, the state’s two racinos⁵ operate under different rules than the riverboats. For example, riverboats are allowed live table games, which are barred from racinos, while the tax rates also differ. Additionally, casinos compete against many other industries for a share of overall discretionary spending.

As these macro trends combine, a number of smaller yet still significant trends have emerged. For example, states that first legalized gaming with slots or video lottery terminals are evolving into full-service casinos, with both slots and table games. In part, this has been facilitated by political pressures for more gaming revenue and to create additional employment opportunities, but it has also been advanced through technology as well. Various companies, most notably Shuffle Master and International Game Technology, have developed popular electronic table games that mimic live table games, sometimes with virtual dealers, but can be governed like slot machines.

That is an example of how political and technological trends can combine to effect changes. The technology that created electronic table games was largely unanticipated when slots were initially authorized in many states, and as the technology developed, new questions arose, such as: Are the electronic games tables or slots?

⁵ “Racino” is a widely used portmanteau formed by the combination of two words, racetrack and casino.

With that in mind, this interim step of electronic table games has made it easier from both a management and a government standpoint to take the next step of live table games. Moreover, in such instances, states are often responding to what other states are doing. This has clearly been the case with West Virginia first adding live tables to its slots-only mix, followed by Delaware and then by Pennsylvania.

Similarly, within the private sector, various operators are taking advantage of expansion by developing a “hub and spoke” business model, in which smaller properties that are generally in markets with a higher gaming tax can feed business to hub properties in destination markets where the tax rates are generally lower. This trend is explained in more detail later in the report.

With these factors combined, Florida is also emblematic of national trends. In-state competition is intense, not just on a geographic basis, but in terms of fighting for parity on issues ranging from the type of offerings allowed to the effective tax rate. Florida is arguably more heightened on the competitive front than other states.

As more than one stakeholder told us during the course of our research for this study, the pari-mutuel industry resembles a “circular firing squad.” Horse racing interests have little in common with their dog-racing counterparts, and both have little in common with jai alai. Even within horse racing, there are warring camps between those who favor racing as the principal line of business and those who favor the casino offerings.

The various parties that comprise the pari-mutuel industry have different agendas as well, with some favoring the addition of table games to pari-mutuels as the principal goal, with others favoring a lower effective tax rate, for example. Pari-mutuels will generally find some common ground among themselves on the issue of a perceived “unlevel playing field” with the Indian gaming operations, as well as in opposition to Internet cafes. Going further, the pari-mutuels will also find common cause with the tribal operations in their shared opposition to proposals to authorize additional destination gaming resorts under a competitive bidding process.

On that latter issue, they all find common ground with business interests in the Orlando region and others, such as No Casinos, in their uniform opposition to the introduction of new destination resorts.

Such shifting alliances and differing agendas are not uncommon within gaming, and highlight two other truisms:

- The status quo always has its adherents, and can make for some unusual political bedfellows.
- Gaming will continue to evolve, with or without guidance or planning from public officials.

The former point is best exemplified by how gaming has evolved in different states. For example, Nevada – the state that is most dependent on gaming revenues for government operations – has no state lottery. At the same time, Internet gambling is just beginning to emerge

in the United States while it is a mature industry in Europe. In both instances, the same explanation applies: Those whose interests are tied to the status quo are more likely to resist change.

That does not mean that the industry will stop changing and evolving. Change will continue, whether public officials play a lead role or not. The factors leading to change, as outlined in this section, will not render any effort to develop a gaming policy as moot. In fact, the presence of these critical factors heightens the need for a comprehensive policy. Based on our research and experience in Florida and elsewhere, gaming will evolve in Florida whether or not the Florida Legislature develops a plan and puts that plan into action. Absent any plan, however, that evolution would be haphazard and would be far less likely to address or advance any public-policy goals.

1. How Governments Respond to Gambling Expansion

Gaming has been expanding for decades and continues to do so. Even when limits are enshrined in the state Constitution, it does not preclude serious expansion efforts. Constitutional limitations, as well as tribal compacts, can be viewed as obstacles to expansion, but in a real-world sense, do not serve as permanent barriers. The best example of this can be found in New York, where the state constitution prohibits commercial gambling, yet it has a highly successful lottery, nine racinos and five Indian casinos – all operating through a variety of exemptions, rulings and legal interpretations. Today, New York Governor Andrew Cuomo is pushing to outright amend the state Constitution to allow full-blown commercial casinos; i.e., those with true slot machines (as opposed to video lottery terminals) and live table games.

Florida’s convoluted gambling laws, which we discuss in detail later in this report, have allowed an expansion of gambling to occur that the Legislature may never have intended. Rulings in recent years by the state’s regulatory agency, the Division of Pari-Mutuel Wagering (“PMW”), have allowed what critics call an “exploitation” of current gaming laws.

As Kent Stirling, executive director of the Florida Horsemen's Benevolent and Protective Association, told the *Tampa Bay Times*, “If the law doesn’t specifically say no, the answer from the department seems to be, always, yes.”⁶

At issue, for example, is the simple definition of a pari-mutuel event. Can it involve just two horses or two jai alai players? Does a horse race have to run on a traditional oval? Can a race begin with a simple drop of a flag? Can an operator comply with the live racing requirement by instituting “barrel” or rodeo-type racing? Can an operator shut down, transfer its live racing dates to another facility and then establish an off-site simulcasting operation with a cardroom? Can a

⁶ Mary Ellen Klas, “Gambling footprint expanding in Florida under Gov. Rick Scott,” *Tampa Bay Times*, June 30, 2013. <http://www.tampabay.com/news/business/gambling-footprint-expanding-in-florida-under-gov-rick-scott/2129317>.

dormant jai alai permit be converted into a greyhound racing permit, with the result similar to the one just described? PMW, through rulings or inaction, has, in effect, answered all of these questions with a “yes.”

The result has clearly been an expansion of gaming that has led to contentious litigation. There are currently 21 lawsuits challenging PMW policies.⁷

States place all sorts of limits on their gaming industry, from geographic locations (as with New Jersey, which restricts casinos to Atlantic City), to limits on the number of licenses (Pennsylvania, Illinois, Massachusetts and others), to limiting gaming to pari-mutuel facilities (as with many states, such as Delaware and New York), to limits on the number of gaming positions per property (Illinois, for example), to requirements that casinos be on riverboats (several Midwest states).

The following macro factors are driving the expansion of gaming:

- As states need more revenue, particularly in periods of economic recession, gaming bills and referenda are more likely to be introduced, and to be viewed favorably. This trend hails back to 1931, when Nevada introduced gambling in the midst of the Great Depression. In 1976, New Jersey voters approved casinos in large measure to assist economically depressed Atlantic City. Economic downturns in the 1990s prompted a number of Midwestern states, from Illinois down to Mississippi, to create riverboat casino industries.
- As related industries such as pari-mutuels see their own revenues and profitability decline, this prompts calls for subsidies, usually in the form of adding slot machines (often followed by table games) to pari-mutuel operations. Consequently, as racetracks use some of this additional funding to increase purses, that trend is further fueled as tracks that compete for horses and export signals are pressured to increase their purses in response.
- States respond to what occurs in other states. One political argument that often gains traction with legislatures and the general public is the notion that one state’s residents are spending their dollars in neighboring states rather than at home. This argument has been used in a variety of states in the last decade including Kentucky, Massachusetts, Ohio and Pennsylvania.
- In the battles between pro-gaming and anti-gaming political campaigns, the playing field is not level in one important sense: Those who oppose gaming’s expansion often succeed, but in many instances they have to continue doing battle in subsequent years. They have to win every time. Those who favor the expansion of gaming need to win only once.

⁷ Ibid.

That latter point can be illustrated in various states. For example, Ohio voters turned down four referenda between 1990 and 2008 that would have legalized casinos in various locations.⁸ In only one of those votes – a 2006 measure to approve two casinos in Cuyahoga County, plus slot machines at seven racetracks – did the measure gain support from more than 40 percent of the voters. Yet, a fifth ballot measure in 2009 to authorize one casino in each of four Ohio cities – Cleveland, Cincinnati, Columbus and Toledo – was supported by 53 percent of Ohio voters.⁹ Consequently, despite four successful efforts to defeat casinos, Ohio is now a gaming state.

The most notable example of this phenomenon can be found in Florida itself, starting with a failed measure in 1978. The following account summarizes that effort:

On November 4, 1978, Florida voters overwhelmingly rejected a proposal to legalize casinos along the Gold Coast – and in Miami Beach in particular. By a lopsided 73 to 27 margin, opponents of the casino legalization measure, led by two-term governor Reubin Askew, carried every county in Florida and beat back a referendum similar in style and substance to the successful 1976 New Jersey initiative.

There were many obvious differences between the two states, which might account for the disparity in the vote. Of these, two are particularly notable: Florida has a large Baptist population and is generally regarded as a politically conservative state; and Florida's economy, including its tourism, was strong. ... As late as August 1978, polls conducted for the casino opposition had concluded that, while the November gambling contest would be close, the momentum of the election appeared to be with the gambling proponents. In the few months between those polls and the November election, a spirited campaign against casinos led by influential south Florida commercial interests appeared and turned a once close contest into a one-sided race.¹⁰

That unsuccessful campaign – which relied on the same campaign manager who conducted the successful 1976 campaign in New Jersey¹¹ – did not end such efforts in Florida.

Spectrum professionals, in previous careers, have been close observers of various gaming efforts in Florida. Indeed, working as a journalist for *The Press of Atlantic City* in 1986, Spectrum Managing Director Michael Pollock witnessed the first in-person meeting between the political directors of two referenda on the ballot that year: an effort to legalize land-based casinos

⁸ Rich Exner, "Ohio Casino vote passes on strength near would-be casinos; a look at the vote," *The Plain Dealer*, November 4, 2009
http://www.cleveland.com/datacentral/index.ssf/2009/11/ohio_casino_vote_passes_on_str.html.

⁹ Ibid.

¹⁰ John Dombrink and William N. Thompson, "The Last Resort: Success and Failure in Campaigns for Casinos," 1990, *Nevada Studies in History and Political Science No. 27*, p. 42
http://books.google.com/books?id=F6Z1G1FqcskC&pg=PA41&lpg=PA41&dq=%22sanford+weiner%22+casino+florida+1978&source=bl&ots=AEigirADF_&sig=82P8HrWd_uUPFZ2JEUbCdTIBurU&hl=en&sa=X&ei=P3iGUfnHG_u94APcI4C4Dw&ved=0CEUQ6AEwAA#v=onepage&q=%22sanford%20weiner%22%20casino%20florida%201978&f=false.

¹¹ Michael Pollock, *Hostage to Fortune: Atlantic City and Casino Gambling*, 1987, p. 16.

in hotels with at least 500 rooms (subject to local approval), and another to legalize a state lottery. At an impromptu meeting at Tampa International Airport, the head of Citizens for Jobs and Tourism, the pro-casino lobby, suggested to his counterpart heading the lottery effort that they coordinate their campaigns to mutual benefit. The offer was politely but firmly rejected and, as it turned out, for good reason: The lottery referendum was approved by a 2-1 margin, while the casino effort lost by the same ratio.¹²

That 1986 Florida referendum, however, proved to be a harbinger as to how gaming issues would evolve throughout the United States, both in terms of public perception and in how pro- and anti-casino campaigns would be funded and operated. This was captured well in a prescient column in the *Sun-Sentinel*, "Money Shouts in Gambling Referendum," that appeared about eight months prior to the November 1986 Florida vote:

A few rich individuals and corporations have the potential of influencing - some even say buying - the result of the November 1986 referendum on legalizing casinos in Florida.

In this state, no limits exist on what one can contribute to a referendum campaign. As gamblers say, the sky's the limit. ...

... Millions of dollars will be spent this year to debate casino gambling. Those who want legalized casinos 'will have a more sophisticated campaign than in 1978,' casino foe (former Gov. Reubin) Askew said. 'I think they'll run a political campaign as opposed to a PR campaign. It's going to be a tough fight.' ...

Pro-casino forces are sensitive about the big-spender image. Therefore they will seek their donations from within the state. And the staff of Citizens for County Choice is all from Florida.

'It shouldn't be a carpetbagger image. It should be a Florida-supported effort and Florida-controlled effort,' said Andrew Rubin, who led Citizens for Jobs and Tourism.

Those favoring legalized casinos like to promote this referendum as democracy at its best, giving people a right to choose. (The proposed constitutional amendment that will appear on the ballot says if casinos are legalized by statewide vote, there still must be a local referendum to decide whether to permit casinos in a particular county.)

'This campaign is a more of a personal rights referendum as against a gambling referendum,' said pro-casino leader Kennedy. 'You are asking people to allow those people who may want casinos to have a right to vote on them.'¹³

Like the 1978 referendum, the 1986 referendum failed, albeit by a smaller margin of only 2-1 (while voters approved the lottery by about the same margin).¹⁴ In between those two failed

¹² Mary Ellen Klas, "A timeline of gambling in Florida," *Tampa Bay Times*, November 25, 2009 <http://www.tampabay.com/news/perspective/a-timeline-of-gambling-in-florida/1054345>.

¹³ Diane Hirth, "Money Shouts in Gambling Referendum, *Sun-Sentinel*, March 23, 1986 http://articles.sun-sentinel.com/1986-03-23/news/8601180125_1_pro-casino-forces-casino-referendum-casino-question.

¹⁴ Klas, "A Timeline of Gambling in Florida."

casino referenda, however, gambling was still emerging and evolving in Florida in the form of “cruises to nowhere,” simulcasting of races and high-stakes bingo.¹⁵ While another proposed constitutional amendment failed in 1994 by a vote of 62 percent to 38 percent, gaming proponents eventually seized a narrow victory in 2004 when a constitutional amendment was approved with less than 51 percent of the vote to allow racinos to open in Miami-Dade and Broward counties.¹⁶

As noted in the previous section, these trends do not evolve in isolation, and the factors that are driving expansion can feed off each other. For example, as states respond to actions taken in neighboring states, gaming is more likely to expand. This has the impact of making states more dependent on gaming revenue for growing portions of their budgets. At the same time, political forces that are pushing for expansion are learning from previous efforts in their own and in other states as to how campaigns could be shaped more effectively with messages that resonate.

Consequently, as more states authorize and expand gaming, bringing it closer to more population centers, participation and familiarity with gaming will inevitably increase. As an industry, gaming is uniquely dependent on – and uniquely intertwined with – the political process, and this relationship largely guides the industry’s growth. John Sowinski, president of No Casinos in Florida, observed a phenomenon that governs how elected officials largely view gaming: “The solution to having too much of it is to have more of it.”¹⁷

Indeed, that observation can be supported through various examples throughout the country. From New England to the Mid-Atlantic region and to the Midwest and beyond, states respond to the expansion of gaming in other states by expanding gaming within their states. As explained in more detail later in the report, the catalysts for such expansion include:

- A state’s residents are spending dollars elsewhere, and those dollars are best kept at home.
- The pari-mutuel industry is hurting, and needs expanded gaming in order to survive and to compete against larger purses available at competing tracks in other states.
- Gaming is viewed as a fiscal solution when states feel the pinch of an economic recession.

Additionally, we note that states that “import” gamblers from other states have a distinct fiscal advantage over states that “export” gamblers: Importing states gain dollars from other states but do not have to fund services such as problem-gambling treatment, which is usually funded by the state where the problem gambler lives. For example, Spectrum learned from

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Interview with John Sowinski, May 29, 2013.

studies we conducted in Massachusetts and Connecticut that problem gamblers who lived in Massachusetts might have been gambling at Connecticut casinos, but Connecticut and its tribal operators did not have to fund any treatment programs for those gamblers. Massachusetts, which had no casinos at the time, funded the treatment absent any funding from gaming.

As noted earlier, limits that are enshrined in the state Constitution do not necessarily preclude serious expansion efforts. Florida offers another telling example of that, in the 2004 constitutional amendment that led to the approval of racinos in Miami-Dade and Broward counties. That amendment initially limited that privilege to operating pari-mutuels, which would have excluded Hialeah. That was changed through 2010 legislation, which survived subsequent legal challenges, but created some new consequences. Veteran gaming reporter Nick Sortal identified those consequences in a report for the *Sun-Sentinel*:

Hialeah Park is reveling in its rebirth, but the racetrack with the pink flamingos has caused a mess across the state.

When its quarter-horse season ends ..., the track that first opened in 1921 will be eligible to house slot machines, thanks to a provision in a 2010 state law. But slot-machine proponents contend that law also applies to other venues, creating a flood of county referendums -- which legislators say illustrate how gambling in Florida has run amok.

Last month, Gadsden and Washington counties approved slot machines via referendum. Palm Beach, Hamilton and St. Johns counties also expect to vote on slots in November, citing the 2010 law.

‘Opening the way to Hialeah opened the way to everything,’ said Ron Book, a lobbyist whose clients include Hialeah’s rival, Magic City Casino. ‘It created a slippery slope.’¹⁸

a. States Endeavor to Realize Value from Gaming via License Fees

One important theme that resonates throughout this report is that no other private industry – and certainly none in the entertainment or hospitality fields – is as dependent as remaining in the good graces of public officials for its ability to earn a profit, or even for its very existence. The flip side of that is that no other private industry has the ability to secure such local or regional monopolies. Sometimes, these local monopolies are granted to private interests simply because those interests own a particular piece of land, such as a racetrack.

In Florida, the holder of a slot machine license must pay an annual license fee of \$2 million, which is due when the application is filed or with the renewal date. There is no fee to obtain an annual pari-mutuel operating license. But in conjunction with its monthly tax payment, each permitholder pays a daily license fee. For jai alai, it is \$40 per game. For greyhound permitholders, it is \$80 per race that may be offset with eligible tax credits under section

¹⁸ Nick Sortal, “Hialeah Park: Flash Point for State’s Gambling Mess,” *Sun-Sentinel*, February 16, 2012 http://articles.sun-sentinel.com/2012-02-16/news/fl-hialeah-gambling-20120216_1_mutuels-pari-mutuels-slot.

550.0951(1), Florida Statutes. For horse racing, the fee is \$100 per race. For cardroom operators, the state charges annually a fee of \$1,000 for each table when the application is submitted.¹⁹

In recent years, a number of states have endeavored to realize value from the issuance of such licenses by requiring license fees or some equivalent in exchange for the rights and privileges of operating a gaming facility.

The core rationale in requiring such one-time fees is that licenses have value, and states should not give away something that could command significant dollars in the open market. Veteran investment banker Jeff Hooke, managing director of Focus Investment Bank, has been a longstanding advocate for the principle of states realizing the full value of such licenses. More than a decade ago, he noted the following regarding states that had authorized gaming in preceding years: "Illinois, Indiana and Michigan awarded the gaming licenses for free to politically connected groups, under the guise of aiding economically depressed areas or failing racetracks. Even after the impact of betting taxes were included, the awardees turned around and made vast profits."²⁰

Hooke collected the data for the following table:

¹⁹ Division of Pari-Mutuel Wagering, email to Spectrum Gaming Group, June 17, 2013.

²⁰ Jeff Hooke, "Jeff Hooke: If you go for slots, make casinos ante up," *Pittsburgh Post-Gazette*, May 14, 2013 <http://old.post-gazette.com/forum/comm/20030514edhooke14p5.asp>.

Figure 1: Gaming license transactions, values

Implied Value (\$M) ²¹	Date	Metro	Buyer/Seller	Transactions/ Offers
\$180	October 2011	New York City	Genting (Malaysia)/State of New York	Transaction ²²
\$435	December 2008	Chicago	Trilliant Gaming/State of Illinois	Offer/Transaction ²³
\$407	August 2007	Indianapolis	LHT Capital/Oliver Racing (Indiana Downs)	Transaction ²⁴
\$250	April 2007	Indianapolis	Indiana Downs/State of Indiana, Hoosier Park/ State of Indiana	Two transactions at \$250 million each
\$160	December 2006	Pittsburgh	PITG Gaming/City of Pittsburgh	Transaction ²⁵
\$220	November 2006	Pittsburgh	Millennium/Magna	Transaction ²⁶
\$140	June 2006	Dania Beach	Dania Jai Alai/Boyd Gaming	Transaction ²⁷
\$340	April 2006	Pittsburgh	Isle of Capri City	Offer ²⁸
\$500	January 2005	Catskills	Seneca Ind./New York State	Offer
\$310	October 2004	Poconos	Mohegan/Penn National	Transaction ²⁹
\$442	July 2004	Philadelphia	Harrah's/Inv. Group	Transaction ³⁰
\$518	March 2004	Chicago	Isle of Capri/State of Illinois	Offer
\$750	January 2001	Cincinnati	Argosy/Inv. Group	Transaction
\$663	November 2000	Detroit	Chippewa/Inv. Group	Transaction ³¹

²¹ The value represents license value only. In several instances, the values of casino structure, horse racing track, jai alai track or relevant real estate were excluded from the transaction value in order to determine the license value. For Pennsylvania transactions/offers, the value includes the \$50 million license fee that is paid by the license holder. The Maryland 2009 license awards have been excluded since the sizable tax rate (67%) precluded high initial fees and the bidding process was not open, but rather skewed toward certain landowners.

²² Aqueduct racetrack slots. The gross amount is \$380 million, minus \$200 million for a state contribution to construction costs. The low price is partly due to New York's high gaming tax rate and high purse contributions. The slots operator may keep only 30% or 35% of the net revenue.

²³ Trilliant Gaming offered \$435 million upfront for a Rosemont, IL, location. The State, however, awarded the license to Midwest Gaming for a Des Plaines, IL, location for \$125 million upfront and \$300 million to be paid at \$10 million per year for 30 years. The total NPV of the Midwest proposal is \$247 million at an 8% rate.

²⁴ Oliver Racing paid \$53.5 million for a 34% interest, plus a \$250 million license fee.

²⁵ PITG agreed to pay a \$7.5 million annual fee to City of Pittsburgh to subsidize a new hockey arena. Hooke Associates estimated the "present value" of the annuity at \$110 million, plus the \$50 million license fee.

²⁶ \$30 million value of racetrack subtracted from \$200 million price (i.e., \$170 million, net) and \$50 million license fee added, in order to provide a \$200 million license value.

²⁷ \$13 million appraised value (tax records) of jai alai fronton excluded from \$153 million purchase price.

²⁸ Isle of Capri offered to build a \$290 million hockey arena and to pay \$50 million for the license.

²⁹ Mohegan Tribe paid \$290 million (after post purchase adjustment) for the license plus the track worth \$30 million. We add \$50 million license fee for a value of \$310 million (i.e., \$290 minus \$30 plus \$50).

³⁰ In exchange for 50% interest, Harrah's put up over \$400 million to construct casino and racetrack.

³¹ Chippewa's buyout of a 40% interest, indicating a 100% interest at \$663 million.

While Hooke is correct in that states can realize value in something that many states had given away, the more immediate incentive is that states can realize significant revenue quickly. That prospect has driven more states in recent years to seek license fees.

However, license fees do have a cost. From the standpoint of a potential developer, a license fee is part of the necessary investment in a potential project. It is the equivalent of the capital investment that would be made in various areas, ranging from site acquisition and improvement to architecture fees and construction costs. But, unlike the costs that are incurred to build a physical facility, the license fee does not add to the value of that facility. When calculating a return on investment (“ROI”), a license fee is part of the investment, which is the denominator in that ratio. But a license fee does nothing to increase the numerator, the profit. Consequently, the license fee is effectively a sunk cost that does not generate revenue, which would in turn fuel various public benefits from gaming taxes to employment.

An operator that does not have to carry that cost can invest more in the property to increase revenue and ROI. That is particularly important in a competitive bidding process. In 2008, Spectrum prepared a report for the Commonwealth of Massachusetts, in advance of gaming legislation that included a provision for a \$200 million initial licensing fee. That report noted the following:

Initial license fees required of successful development bidders are generally viewed as part of their capital investments and therefore:

- Have a detractive effect on capital development spend, as the licensing expense competes internally for capital with construction spending.
- Pose a dampening effect on development interest among potential candidates, as the fees raise the cost of entry with no direct return on that expense, and thereby simultaneously reduce projected ROIC rates.

This is not to say government entities should not impose substantial operator license fees, to both winnow out under-resourced bidders and help recoup the state’s own start-up and other infrastructure costs, but rather to make clear the underlying considerations.

At a \$200 million minimum bid, the Massachusetts casino licensing fee, combined with the minimum development requirements, will ensure that only financially strong companies will apply. On the other hand, this is potentially \$200 million less in capital invested into each of the destination casinos. This fee could be viewed by both the state and license applicants as the price of operating in a closed, geographically protected environment.³²

³² Spectrum Gaming Group, “Comprehensive Analysis: Projecting and Preparing for Potential Impact of Expanded Gaming on Commonwealth of Massachusetts,” August 1, 2008. p. 119.

Three years later, the Expanded Gaming Act became law in Massachusetts, and included a minimum \$85 million licensing fee, significantly lower than what had been contemplated in the 2008 proposed legislation.³³

Between 2008 and 2011, a severe national recession struck, which certainly played a role in convincing lawmakers in Massachusetts to reduce the required minimum capital investment. At the same time, however, we suggest that lawmakers also recognized that a large license fee could also detract from capital investment and its subsequent economic benefits.

Based on the language within its statute³⁴ that governs the competitive bidding process, Massachusetts is a pioneer in the planning of gaming. The law requires bidders to put forth comprehensive proposals that address many areas that are often not addressed, or paid little heed, in other gaming statutes. Such areas range from impact on employment to impact on local arts, as well as on small businesses.

2. Racetrack Casinos Evolve, Table Games Arrive

In 1990, the concept of a racino was introduced to the United States with the opening of 165 video lottery terminals (“VLTs”)³⁵ at Mountaineer Park Racetrack in West Virginia. With the success of the West Virginia experiment, racinos soon spread to Rhode Island, Iowa and Delaware. Many states that introduce commercial casino gambling do so through the initial introduction of slots-only facilities. Examples of this include, among others, Pennsylvania, Delaware, West Virginia, Rhode Island, New York and Florida racinos – although poker at the Florida tracks is a notable exception. The logic behind such moves tends to include the following:

- Slots are viewed as more politically acceptable.
- Slots – because they lack live dealers, as well as necessary controls over dice and other gambling paraphernalia – are viewed as easier to regulate.

The latter point is particularly noteworthy for states in which the lottery is vested with the authority to oversee slots or VLTs, such as Delaware, Maryland, New York, Rhode Island and West Virginia. However, even in lottery states, the natural evolution over the past decade has been to add live tables to slots-only facilities. We attribute that trend to two larger forces at play, which are dealt with in more detail elsewhere in this report:

³³ Massachusetts Expanded Gaming Act <http://massgaming.com/about/expanded-gaming-act/> (accessed May 8, 2013).

³⁴ Ibid.; see <http://massgaming.com/wp-content/uploads/Chapter-23K-2012.pdf>.

³⁵ From the standpoint of a player, slots and VLTs are indistinguishable. The core difference is that slots can be standalone devices, while VLTs can be tied to a central system that monitors and/or controls all critical aspects of the games.

- Fiscal pressures to generate additional revenue, as well as pressure to add jobs.
- The need to respond to actions in other, often neighboring states.

Within a span of about two years, West Virginia added live table games, followed by Delaware and then Pennsylvania – states that, to varying degrees, have overlapping markets. Maryland followed suit by adding tables to its slots facilities this year. The trend was captured in a quote by Mark Nichols, an economics professor with the Institute for the Study of Gambling and Commercial Gaming at the University of Nevada at Reno: “Maryland is getting what the other states already have, which is going to make it very difficult for casinos in West Virginia and Delaware. The only way they can keep those Maryland residents from staying in Maryland is offering incentives or differentiated products that somehow make it worthwhile to travel. But almost anything they try, Maryland can copy. I’m not sure there’s much they can do.”³⁶”

If regulated properly, the addition of table games can be a smooth transition that can also encourage capital investment and expansion. The addition of house-banked table games such as blackjack to a slots-only casino can serve to increase slot revenue. This seems counter-intuitive (the natural assumption is that new table games would simply cannibalize existing slot play) but experience in markets that have added tables to casinos that previously offered only slot machines shows otherwise. This phenomenon can be attributed to two major factors:

- Some new table-game customers (who previously had no incentive to visit a slots-only casino) can be expected to apportion some of their own spending to slots.
- Some of these new customers would be accompanied by other guests – such as a spouse or a friend – who would play slots during these visits.

Spectrum’s research finds no compelling evidence that adding table games to a slots-only casino would reduce slot revenue. In fact, research shows that slots and table games in a casino are complementary assets.

The remainder of this section shows examples of states and/or casinos where table games were added to what were once slots-only casinos.

a. Mid-Atlantic – Pennsylvania and Delaware, Collective Example

By way of example, casinos in both Delaware and Pennsylvania had been limited to slots prior to May 2010, but then table games were added to all 12 casinos in these states between May and July 2010.

Through the 12-month period ending April 2010 (pre-table games), the 12 casinos generated \$3.09 billion in slot revenue. Through the 12 months ending July 2011 (the first full

³⁶ J. Freedom Du Lac, “Maryland raising stakes in casino wars with Delaware and West Virginia,” *Washington Post*, March 31, 2013 http://articles.washingtonpost.com/2013-03-31/local/38170896_1_maryland-live-delaware-park-table-games.

annualized period when all 12 casinos had table games for the full duration of period), the same 12 casinos generated \$3.26 billion in slot revenue (an increase of 5.6 percent over the period without having table games). Table games revenue at these 12 casinos amounted to \$508 million through 12-month period ending July 2011.

The overall increase in gross gaming revenue (“GGR”) for both tables and slots between the two periods was 22.1 percent, while table games revenue accounted for 74.5 percent of the GGR growth and slot revenue accounted for 25.5 percent of the GGR growth. Importantly, this growth occurred at a time when other casinos were opening in the region (SugarHouse in Philadelphia, PA, and Hollywood in Perryville, MD, in September 2010, along with Ocean Downs in Worcester, MD, in January 2011).

b. Delaware

Slots-only casino gambling commenced at Delaware’s three racinos in 1995, with table games operations commencing in 2010. Since table games effectively came online midway in 2010, we examined slot revenue variance data – comparing second half of year to first half of year – for 2008 through 2012 (two entire calendar years before and after table games). In the two years before table games, slot revenue was less in second half of year (July through December) than it was in first half of year (January through June), and for each casino.

To determine whether the implementation of table games had a material impact on slot revenue we examined the slot revenue variance in 2010 (when all Delaware casinos offered table games in second half of year). If the introduction of table games had a significant, negative impact on slot revenue we would expect to see the slot revenue variance to be inconsistent with 2008 and 2009 variance data (i.e., prior to table games). The following table illustrates this slot revenue variance data in Delaware from 2008 through 2012 – where 2010 (as highlighted) was the year when table games commenced operations midway through the year.

Figure 2: Delaware casinos, slot revenue variance – pre and post table games (2008-12)

Slot Revenue Variance	Delaware Park	Dover Downs	Harrington Raceway	DE TOTAL
2008 (2nd Half vs. 1st Half)	(12.6%)	(2.5%)	(14.2%)	(9.4%)
2009 (2nd Half vs. 1st Half)	(13.1%)	(5.5%)	(10.9%)	(9.9%)
2010 (2nd Half vs. 1st Half)	(12.1%)	(5.5%)	(9.0%)	(9.0%)
2011 (2nd Half vs. 1st Half)	(7.4%)	(3.9%)	(11.6%)	(6.9%)
2012 (2nd Half vs. 1st Half)	(14.1%)	(17.4%)	(18.7%)	(16.4%)

Source: Delaware Lottery, Spectrum Gaming Group

As illustrated, on a statewide basis (and consistent amongst casinos), the decline in slot revenue (second half of year compared to first half of year) was greater in the two years without Delaware having table games than it was in both the first and second years following the commencement of Delaware offering table games. Specifically, slot revenue only declined by 9 percent in 2010 from the first half of year to second half of year (when table games were fully

operational); this percentage decline was greater in 2008 and 2009, absent presence of table games (at 9.4 percent and 9.9 percent, respectively). We note that in 2011, the decline in slot revenue from the first half of the year to the second half of the year was even less pronounced than in prior years (at only 6.9 percent), which may suggest that table games were complimentary to slots and/or that table games enhanced overall appeal of Delaware's casinos.

We acknowledge that myriad other factors may impact these aforementioned growth rates, as illustrated in 2012, when growth rates plummeted from first half of year to second half of year (i.e., possibly due to opening of Maryland Live Casino located near Baltimore, MD, in June 2012 along with widespread impact of Superstorm Sandy hitting the region in October 2012).

c. West Virginia

There are four racinos in West Virginia, with all four offering table games. Initially, all four racinos were limited to slots: The racinos offer VLTs that are operated by the West Virginia Lottery, while there is also a network of limited VLT operations at numerous, licensed locations statewide.

In mid-2007, voters (via referendum at the host county level) supported allowing table games at three of the four racinos (the referendum failed in Jefferson County, home to Charles Town – the state's largest racino). Consequently, two casinos (Mountaineer Park and Wheeling Island) began table game operation in late 2007 while Tri-State Park began table game operations in August 2008. A December 2009 referendum to add tables at Charles Town did pass and table game operations commenced in July 2010. (A fifth casino, the Greenbrier resort, began operations in West Virginia in October 2009. The Greenbrier, a resort hotel with no racetrack, offers both slots and table games.)

We examined slot revenue performance at Charles Town, since this racino generates more than half of the GGR in West Virginia, and is relatively isolated from any other racino in West Virginia or neighboring states. Specifically, we examined slot revenue variance data – comparing second half of year to first half of year – for 2008 through 2012 (two years before and after table games – as table games became operational in July 2010 at Charles Town). In the two years before Charles Town having table games, slot revenue was lower in the second half of the year than it was in the first half of year.

To determine whether the implementation of table games had a material impact on slot revenue, we examined the slot revenue variance in 2010 (when Charles Town added table games in the second half of year). If the introduction of table games had a significant, negative impact on slot revenue, we would expect to see the slot revenue variance to be inconsistent with 2008 and 2009 variance data (prior to table games). The following table illustrates this slot revenue variance data at Charles Town from 2008 through 2012 – where 2010 (as highlighted) was the year when table games commenced operations midway through the year.

Figure 3: Charles Town Races (WV), slot rev. variance – pre and post table games (2008-12)

Slot Revenue Variance	Charles Town Races
2008 (2nd Half vs. 1st Half)	(8.3%)
2009 (2nd Half vs. 1st Half)	(13.2%)
2010 (2nd Half vs. 1st Half)	(1.5%)
2011 (2nd Half vs. 1st Half)	3.2%
2012 (2nd Half vs. 1st Half)	(18.6%)

Source: West Virginia Lottery, Spectrum Gaming Group

As illustrated, the decline in slot revenue (second half of year compared to first half of year) was greater in the two years without Charles Town having table games than in the initial year of Charles Town offering table games. Specifically, slot revenue only declined by 1.5 percent in 2010 from first half of year to second half of year (when table games were fully operational) while this percentage decline was greater in 2008 and 2009, absent presence of table games (at 8.3 percent and 13.2 percent, respectively). We note that in 2011, there was an increase in slot revenue from first half of year to second half of year, which may suggest that table games were complimentary to slots and/or that table games enhanced overall appeal of Charles Town (i.e., translating into greater slot revenue levels than what would otherwise be, absent table games).

As with Delaware (and so noted above), there are numerous factors that may impact growth rates.

d. Pennsylvania

There are 11 casinos in Pennsylvania, all of which prior to mid-2010 were limited to slots. Table games operations commenced in July 2010.

In reviewing slot revenue results for the first full year that Pennsylvania's casinos offered table games (LTM June 2011) compared to the full year prior (LTM June 2010) we see inconclusive results on the collective impact of table games on slot revenue. Collectively, slot revenue grew by 10.7 percent when comparing the two periods; however, nearly all of this slot revenue growth occurred at two of the newer casinos (Sands Bethlehem and Rivers, opening in May 2009 and August 2009, respectively) and as a result of a new casino in Philadelphia (which opened in September 2010).

The seven Pennsylvania casinos that opened in 2007 and 2008 had a collective 0.1 percent increase in slot revenue when comparing LTM June 2011 to LTM June 2010 (i.e., post-vs. pre-table games). Four of the seven reported increased slot revenue, while three of the seven reported declines in slot revenue.

This was, of course, a period of significant change in Pennsylvania's gaming industry, with additional casinos opening in-state and in surrounding area. That makes it difficult to isolate any precise cause and effect on either table or slot revenue. Still, we note that any expected

cannibalization of slot revenue by the addition of table games did not materialize in Pennsylvania.

3. Battle for Entertainment Dollars: Competition on a Broader Scale

Caesars Entertainment Chairman, President and CEO Gary Loveman recently offered criticism of how the casino industry tends to break down revenue into two categories: gaming and non-gaming. Loveman suggested there is a problem in the industry's mindset when other revenues are defined by what they are not, rather than what they are. He noted, for example, that we don't divide people into two genders: "women and non-women."³⁷ Rather, he characterized other revenues as "entertainment" dollars, forecasting an evolution at his company and other gaming providers in which they broadly compete for a share of all discretionary income.

That might be a welcome and necessary step in an industry that is increasingly facing saturation in its core business. But that evolution has implications for other businesses, industries and regions that already battle for that entertainment dollar, and that do not offer gaming – nor do they intend to offer gaming as an option.

From Florida's standpoint, this issue is most readily apparent in Orlando, a successful, world-class resort by any standard that has managed to achieve success in multiple categories, most notably for purposes of this discussion: families with children; and business travel, particularly in the MICE (meetings, incentives, conferences and exhibitions) segment.

Due to its abundance of theme parks, hotels and other assets and infrastructure, Orlando competes nationally and globally in various segments, and Las Vegas – a destination centered on gaming – is clearly a competitor. Interestingly, Las Vegas endeavored to leverage its brand into the family segment, but has more recently sharpened its focus on more adult segments, as noted here:

By the late 1980's gaming revenue in Las Vegas was down as other areas in the country started to legalize gambling. In an attempt to stimulate visitor numbers the city was reinvented in the image of Disney. Themed hotels such as the Luxor and Excalibur emerged allowing Las Vegas to market itself as a place for adults to gamble while their children played at theme parks such as the one built by the MGM Grand. Circus Circus a kid's themed hotel that was built in 1976 was the only hotel that attended to the needs of children. With the development of these new hotels Circus Circus would now face competition for the younger demographic of customers and their families. Las Vegas in the 21st Century saw its second major change in visitor demographics. No longer the place for the family, Las Vegas has morphed into one of the top party cities in the world, ranking top ten in numerous different polls. Attracting 21 – 34 years olds from all over the world, Las Vegas now ranks number one in categories such as, top destination for

³⁷ Gary Loveman, keynote speech at East Coast Gaming Congress, Atlantic City, NJ, May 22, 2013.

bachelor and bachelorette celebrations (www.AskMen.com 2009), top destination to celebrate a 21st birthday (www.ehow.com).

The sudden influx of younger tourist[s] can be attributed to the erection of new nightclubs and pool parties in many of the Las Vegas Hotels. MTV's reality TV show "the real world" portrayal of Las Vegas as a party city has also been a catalyst for the younger crowd to Las Vegas.³⁸

Based on our experience, we concur with the observation that Las Vegas operators determined that Las Vegas would not succeed in rebranding itself as a family destination, and began targeting hedonistic adults (best evidenced by the "what happens in Vegas stays in Vegas" campaign) and business travelers.

While Orlando and Las Vegas do not share the same *raison d'être*, they do share one critical characteristic: Both destinations developed from scratch, in a relatively brief period, a massive infrastructure of hotel rooms, meeting and convention space, and entertainment attractions. Each destination has a critical mass of attractions, which helps fuel visitation. John McReynolds, Senior Vice President of External Affairs for Universal Parks & Resorts, noted, for example, that Universal does well when other attractions in Orlando prove to be popular, and the success of the Wizarding World of Harry Potter serves as a magnet that, in turn, increases overall attendance, which benefits other non-Universal attractions.³⁹

According to McReynolds, almost 85 percent of the Orlando market is represented by the leisure market, with the remaining 15 percent being made up by the MICE market.⁴⁰ Total business attendance in Orlando has more than doubled in the past 20 years through good economic times and bad.

In Orlando, the conventions and meetings business is anchored by the Orange County Convention Center, where convention business is on an upswing and is approaching its pre-recession peaks.

Notably, that center has been hailed by Business Review USA as the top major convention destination in the nation: "Central Florida's OCCC is a massive center, offering 2,100,000 square feet of exhibit space in its 7,000,000 square-foot complex. But it's not just size that brought OCCC to the top of our list. The OCCC provides Central Florida with a remarkable amount of economic benefits at no cost to the county's citizens and it is estimated that activity in the center yields an annual tax savings of \$87.50 per Orange County household. This self-proclaimed "Center of Hospitality" offers amenities to please (including massage services, three

³⁸ Joseph Akinsete, "Las Vegas visitor demographics: Be careful what you wish for," University of Nevada, Las Vegas, April 1, 2010, p. 3-4.
<http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1595&context=thesedissertations>.

³⁹ Interview with John McReynolds, May 29, 2013.

⁴⁰ *Ibid.*

full-service restaurants, eight food courts and remote airline check-in) and was the staging area for relief operations for Hurricanes Charley, Frances and Jeanne.”⁴¹

On a national level, many of the major convention destinations in Orlando’s competitive set are also hosting casinos. The number of major convention cities with casinos already includes Las Vegas, Philadelphia, New Orleans, Detroit and New York, and will soon include Boston, and the possibility of additional gambling venues in Chicago. Atlanta, another major convention destination in the Southeast, has been contemplating gaming for several years.

In 2007, PKF Consulting released a report on the potential economic impact of a casino in Atlanta, and its executive managing director Mark Woodworth made this statement: "We're seeing more and more destinations that have gambling, which functions as an important amenity, especially in attracting group meetings and conventions."⁴²

In our view, Orlando’s ability to grow its conventions and meetings business in the face of this countervailing national trend underscores an important asset in this market: Orlando’s strength in attracting business travelers is growing without gaming, and that absence is to some degree fueling that growth. Orlando has carved out a significant, profitable niche in that national market, and gaming would clearly be antithetical to that image and its ability to dominate that important segment.

Interviews with various hotel operators in the Orlando area, which are members of the Central Florida Hotel & Lodging Association, have lent support to that view. The members interviewed for this report note, for example, that many of the meeting planners who book Orlando for their groups cite the absence of gambling as a plus, since that attraction might otherwise be viewed as a distraction. Thea J. Sargent, General Manager of Disney’s Contemporary Resort in Orlando, expressed a view that was endorsed by many of her colleagues when she said the absence of gaming and the focus on other attractions “differentiates us (as a) family-friendly destination.”⁴³ The Orlando hotel owners interviewed for this report note that convention attendees and other business travelers who visit Orlando often extend their stays and bring their families with them.

A 2011 survey of Orlando visitors shows the various activities they participate in during their stay. The percentages listed here reflect the percentage of visitors who reported participating in each activity.

⁴¹ “Top Ten U.S. Convention Centers,” *Business Review USA*.
http://www.businessreviewusa.com/business_leaders/top-ten-us-convention-centers (accessed May 30, 2013).

⁴² Rachel Tobin Ramos, “Downtown Casino Could be \$1.6B Jackpot,” *Atlanta Business Chronicle*, February 12, 2007. <http://www.bizjournals.com/atlanta/stories/2007/02/12/story1.html?page=all>.

⁴³ Interviews with members of the Central Florida Hotel & Lodging Association, May 29, 2013.

Figure 4: Activities participated in during visit to Orlando

	Domestic Leisure	Domestic Convention-Group Meeting
Theme/Amusement Park	50.3%	15.5%
Dining	31.6%	39.5%
Shopping	31.5%	18.3%
Entertainment (Gen)	29.7%	16.4%
Touring/Sightseeing	17.1%	4.4%
Beach/Waterfront	12.2%	5.8%
Concert, Play, Dance	11.6%	4.4%
Night Life	10.9%	7.8%
Parks: national, state +	6.2%	1.9%
Festival, Craft Fair +	3.2%	0.8%
Hike, Bike +	3.0%	0.8%
Visit Historic Site	2.9%	2.4%
Play Golf	2.5%	1.8%
Museum, Art Exhibit	2.2%	3.2%
Boat/Sail	1.9%	1.3%
Hunt, Fish	1.2%	0.1%
Watch Sports Event	1.1%	0.5%
Other Adventure Sports	0.7%	0.0%
Look at Real Estate	0.6%	0.1%
Gamble	0.5%	0.1%
Nature/Culture -- Eco-travel	0.5%	5.5%
Camping	0.4%	0.0%
Shows: boat, auto, antique +	0.2%	0.0%

Source: D.K. Shifflet, Visit Orlando

Notably, gambling is listed as an activity, and the Orlando hotel operators interviewed for this study note that the Seminole Hard Rock Tampa – about 60-80 miles from the Orlando area – is an available attraction, which the hotel operators view as far enough away to not detract from the Orlando brand, but close enough to satisfy visitors who want to visit a casino during their stay.⁴⁴

But while Orlando can differentiate itself from Las Vegas or other gaming destinations, such convention markets still compete, in general and in specific instances. A conference of Wendy's franchisees recently selected the MGM Grand in Las Vegas over Orlando, based on a \$250,000 incentive that the MGM provided, which the Orlando competition could not match – although it did match other factors, such as the average daily room rate.⁴⁵

Orlando is able to compete on other levels as well, such as the absence of union-related rules in other states that often add to the cost of setting up conventions and other meetings, as

⁴⁴ Ibid.

⁴⁵ Ibid.

Florida is a “right to work” state.⁴⁶ We also note, however, that Orlando competes on an in-state as well as a national level, and would not be immune to the impacts of any change in gaming policy elsewhere in Florida.

Figure 5: Leisure, convention travel to Orlando by origin DMA, 2011

Origin DMA (Top 15)	Domestic Leisure	Domestic Convention/Group Meetings	
Orlando-Daytona Beach-Melbourne, FL	15%	Tampa-St. Petersburg (Sarasota), FL	12%
Tampa-St. Petersburg (Sarasota), FL	13%	Orlando-Daytona Beach-Melbourne, FL	11%
Miami-Ft. Lauderdale, FL	6%	Miami-Ft. Lauderdale, FL	10%
New York, NY	6%	Dallas-Fort Worth, TX	5%
Jacksonville, FL	6%	Oklahoma City, OK	5%
West Palm Beach-Ft. Pierce, FL	4%	Los Angeles, CA	4%
Chicago, IL	3%	Philadelphia, PA	3%
Atlanta, GA	3%	New York, NY	3%
Boston, MA (Manchester, NH)	2%	Houston, TX	3%
Washington, DC (Hagerstown, MD)	2%	Columbia-Jefferson City, MO	2%
Philadelphia, PA	2%	Chicago, IL	2%
Ft. Myers-Naples, FL	1%	Atlanta, GA	2%
St. Louis, MO	1%	Huntsville-Decatur (Florence), AL	2%
Houston, TX	1%	Baltimore, MD	2%
San Francisco-Oakland-San Jose, CA	1%	Phoenix, AZ	1%

Source: Visit Orlando, D.K. Shifflet & Associates

The table above shows that, in both domestic leisure and convention/group business, designated market areas (DMAs) – which are independent media markets – in other regions of Florida are critically important to Orlando. Daryl Cronk, Director of Research at Visit Orlando, described this phenomenon:

Yes, proximity is a factor. Please keep in mind the data includes both overnight stays and day-visits. The proximity of Daytona to the east, and Tampa to the west, makes Orlando a popular destination for day-trips. It may be to attend a convention, to visit a theme park, a special event such as Halloween Horror Nights at Universal or Food & Wine at Epcot, or something as simple as a Magic game (just like I have friends to go to Tampa for Rays games). And of course lots of VFR travel (visiting friends and relatives).

Origin markets take on a slightly different look if day-trips are excluded. Still a lot of in-state but not as much.⁴⁷

Even when the origin markets are limited to overnight stays, local markets play less of a role, as Cronk noted, but are still important:

⁴⁶ Ibid.

⁴⁷ Email from Daryl Cronk, May 24, 2013.

Figure 6: Market of origin share of overnight stays in Orlando

Origin DMA: Overnight Leisure	2010-2011
Tampa-St. Petersburg (Sarasota), FL	9.0%
New York, NY	7.7%
Orlando-Daytona Beach-Melbourne, FL	6.9%
Miami-Ft. Lauderdale, FL	6.1%
West Palm Beach-Ft. Pierce, FL	4.0%
Jacksonville, FL	3.9%
Atlanta, GA	3.7%
Chicago, IL	3.1%
Boston, MA (Manchester, NH)	2.8%
Philadelphia, PA	2.4%
Washington, DC (Hagerstown, MD)	2.0%
Ft. Myers-Naples, FL	2.0%
St. Louis, MO	1.7%
Dallas-Fort Worth, TX	1.5%
Detroit, MI	1.4%

Source: Visit Orlando, D.K. Shifflet & Associates

Taken together, these factors – the evolution of gaming into broader entertainment, the availability of gaming in convention destinations, and Orlando’s dependence on both local and national markets – support many of the concerns expressed by the Orlando business community as to the expansion of gaming throughout Florida, particularly the possibility of new destination resorts.

Clearly, the addition of such destinations – which would add new supply to the competitive conventions and meetings business, while adding additional amenities to competing facilities in South Florida – raises the possibility of an adverse impact on business in the Orlando area.

John Sowinski of No Casinos said the impact would not necessarily be limited to the larger players in Florida markets, but could have serious ramifications for the smaller attractions, many of which depend on in-state and out-of-state visitors who are looking for secondary and tertiary activities during their leisure time. Sowinski suggests that such attractions – which might include Gatorland in the Orlando region or Jungle Island in the Miami area – might be more likely to lose out if more discretionary dollars are targeted toward gambling.⁴⁸

Las Vegas’s failed foray into re-branding itself as a “family” destination underscores the success of the Orlando region, which can rightfully claim ownership to that brand. Anecdotal evidence suggests that the brand equity of Orlando has benefits for the entire state of Florida. In fact, much of the image of the state of Florida is centered on theme parks and families.

The risk that gambling poses for Florida’s existing tourism brand was also noted by William Bunkley of the Florida Ethics and Religious Liberty Commission, who testified before the Senate Gaming Committee meeting earlier this year, and noted: “We have a brand here in Florida. It is tourism. It is fishing. It is outdoor sports. And though we have had some expansion

⁴⁸ Interview with John Sowinski, May 29, 2013.

of gambling, I got to tell you that Las Vegas tried the family gambling routine. It did not work,” Bunkley said. “We have a lot of people coming, supporting our state in the area of tourism, and I am very concerned about the future.”⁴⁹

More generally, and with respect to Florida, expanded gambling may fundamentally change the state of Florida as a place to live and visit. Bill Lupfer, of the Florida Attractions Association, suggests that the expansion of gambling, particularly casino gambling, will be damaging to “the Florida brand.” Lupfer argues that many states with casinos legalized them in order to attract tourists. This was certainly true in the 1990s when casinos first began to expand outside Nevada and New Jersey. Florida, however, already offers more attractions than any other state; it doesn’t need casinos to attract tourism, he notes.⁵⁰ Rather than benefitting the state, expanded gambling (especially casinos) could make Florida a less-attractive tourist destination.

The tourism industry leadership in Orlando, as interviewed for this analysis, appears unified in its view that any expansion of gaming in Florida would have several tremendous economic and social impacts to the State.

If gambling were to be expanded in Florida, tourism leaders cite a variety of potential implications, including the following:

- Economic costs
 - Impact to Orlando’s global brand position.
 - Change in target market of the destination and thus potential economic losses.
 - Potential cost of moving to the unionization of hotels.
 - Economic impact to small businesses.
 - Lost business because some meeting planners will not book business in gaming destinations.
- Social costs
 - Change in the brand position and potential loss of global goodwill.
 - Change in staffing at properties that might impact the friendliness of the destination, which in turn might damage Orlando’s reputation as a friendly destination.
 - Change in the perceptions of safety, as the leisure market will not choose destinations where safety may be compromised.

⁴⁹ Florida Senate Gaming Committee, February 18, 2013
http://www.flsenate.gov/media/videoplayer.cfm?EventID=2443575804_2013021203.

⁵⁰ Bill Lupfer, Florida Attractions Association, phone interview, May 23, 2013.

4. Conclusion

Intentionally or not, the policies established by lawmakers – or the lack thereof – play a critical role in the evolution and expansion of gaming. Indeed, in the views of many, the “evolution” and “expansion” of gaming are largely synonymous. The industry rarely shrinks, and quite often, expands as a result of expansion. As demonstrated in this section, the notion expressed by John Sowinski of No Casinos that the answer to saturation is often more gaming can be borne out by examples. Even industry segments that have seen their customer base decline – such as jai alai or dog racing, as well as other segments of the pari-mutuel industry – are still in business. Rules that may seem fixed and immutable – such as constitutional amendments – often prove to be less than immutable. Policymakers need to be aware that every change in policy creates consequences that, in turn, create a demand for more policy changes. As demonstrated in the past, such changes often lead to an expansion of gaming, which creates a demand for more changes.

Such changes could have significant impacts that extend beyond gaming, as evidenced by the concerns expressed by the business community in Orlando.

Types of Gambling and Their Performance, Participation

Legalized gambling is seemingly everywhere in the United States:

- 43 states have a lottery, with a 44th – Wyoming – having enacted lottery legislation in March 2013.
- 42 states have casinos of some kind, whether Las Vegas-style, floating, Indian, racetrack, or slots-only. Even Arkansas and Kentucky – considered non-casino states by the American Gaming Association – each have two racetrack gaming facilities that offer hundreds of Instant Racing machines⁵¹ and/or “electronic games of skill” reel games in a casino-like setting (and thus are included in our casino count), indicative of the efforts by operators and/or states to capitalize on the popularity of casinos. In total, there are approximately 985 casinos in the United States.⁵²
- 33 states have pari-mutuel racing, whether horse racing, dog racing or jai alai.
- 7 states have what Spectrum terms “retail gaming,” which is the widespread placement of a small quantity of slot machines (generally 5 to 10) inside retail businesses throughout a state (typically liquor-licensed establishments).

⁵¹ See description of Instant Racing machines at the Ellis Park website:
<http://www.ellisparkracing.com/news-and-events/instant-racing/>.

⁵² Based on American Gaming Association and Spectrum counts.

- 5 states have standalone cardrooms, which offer poker and, in some cases, casino card games. At the end of 2012, there were standalone 407 cardrooms in the United States.
- 2 states have sports betting.

For better or for worse, legalized gambling is growing – in dollars, in locations and in options. Many states are clamoring to either legalize a new form of gambling or expand what they already have – and these debates are a regular occurrence in statehouses across the country. The proponents in such states argue either that they need the additional tax receipts and/or jobs, or that they need to stem the flight of residents’ gambling dollars to neighboring states. The nascent rollout of Internet gambling has begun changing how gambling will be delivered, played, taxed and accepted – in statehouses, among gambling operators, and among patrons. Opponents argue legalized gambling has spread too far, leading to negative impacts that include addiction, personal bankruptcy, crime and industry cannibalization of consumers’ discretionary dollars.

Florida is among the more gambling-rich states, as measured by number and types of options:

- 8 Indian casinos (7 Seminole, 1 Miccosukee)
- 1 state lottery, the nation’s second-largest as measured by FY 2011 sales excluding VLTs
- 27 pari-mutuel facilities (plus intertrack at Ocala),⁵³ including:
 - 24 with active cardrooms
 - 14 with live greyhound racing
 - 5 with live horse racing (thoroughbred, standardbred, and quarter horse [including barrel racing])
 - 6 with active jai alai
 - 6 with slot machines (a seventh, at Hialeah Park, opens in summer 2013)
- Charitable bingo throughout the state, regulated at a local level.

In addition, day-cruise vessels and cruise ships that dock at various Florida ports offer unregulated (but not illegal) casino gambling once they reach international waters three miles offshore on the Atlantic side, but 10 miles on the Gulf side.

⁵³ Data from Florida Division of Pari-Mutuel Wagering; July 24, 2012, facilities map and fiscal year-to-date data through March 2013. <http://www.myfloridalicense.com/dbpr/pmw/documents/FACILITIESMAP--Internet-hyperlinks.pdf> and <http://www.myfloridalicense.com/dbpr/pmw/documents/Stats/HandleandCardroom2012-2013--2013-05-13--April--YTD.pdf>.

1. The Prevalence of Gambling

a. Nationally

To our knowledge, the most comprehensive gambling studies, both nationally and for Florida on a statewide basis, were conducted more than a decade ago. The first authoritative national gambling research was conducted by the Commission on the Review of the National Policy Toward Gambling in 1976. The most extensive and authoritative nationwide study was published in 1999 by the National Opinion Research Center at the University of Chicago in a 768-page report. This groundbreaking research compiled survey results from approximately 3,000 gamblers and non-gamblers and was conducted as part of the National Gambling Impact Study Commission for the federal government. The study documented gambling prevalence among US residents at a lifetime rate of 68 percent and a past-12-months rate of 61 percent for all forms of gambling.⁵⁴

Gambling has expanded greatly since 1999, when some form of legalized gambling was being offered or had been approved in a total of 25 states,⁵⁵ to the present where 42 states currently offer some form of legal gambling other than the lottery. The most recent information on national gambling prevalence comes from the American Gaming Association's ("AGA") 2013 *State of the States* survey. While this is not a rigorous academic study it does represent the most up to date data released, released in the first week of May, 2013. This latest update to the annual study documents gambling prevalence as follows among the general US population:

- Past -12-months participation in the following gambling activities:
 - Lottery 53 percent
 - Casino gambling 32 percent
 - Casual betting with friends 26 percent
 - Playing poker 12 percent
 - Wagering on a race 6 percent
 - Internet gambling 3 percent

From the above information we can extrapolate that almost one-third of the adult population over 21 in the United States has gambled in a casino within the past year. Among young adults, aged 21 to 35, the proportions playing the lottery, betting casually with friends, playing poker, and gambling over the Internet are significantly greater.

⁵⁴ "Gambling Impact and Behavior Study, Report to National Gambling Impact Study Commission," National Opinion Research Center at the University of Chicago, April 1, 1999.

⁵⁵ American Gaming Association, *1999 State of the States*; the yearly AGA reports are available at <http://www.americangaming.org/industry-resources/research/state-states>.

Of course, gambling incidence varies considerably with access to local or regional gaming facilities. Various studies commissioned by individual states since 1976 have shown lifetime prevalence rates ranging from 64 percent to 96 percent, with past-12-month prevalence rates ranging even more broadly from between 49 percent to 89 percent.⁵⁶ A meta-analysis of available research across the United States and Canada conducted in 1997 estimated a lifetime gambling prevalence rate of 81 percent in the general population across the country as a whole.⁵⁷

b. Florida

The most comprehensive study of gambling behavior across the state of Florida was conducted for the Florida Council on Compulsive Gambling Inc. (“FCCG”) by the University of Florida in 2001. The study documented gambling prevalence and participation rates as follows:⁵⁸

- Lifetime gambling prevalence of approximately 90 percent among Florida residents, ages 18 and older:
 - 10 percent of Floridians surveyed report they have never gambled
 - 20 percent have not gambled in the past 12 months
 - 45 percent have gambled in the past 12 months
 - 25 percent gamble weekly
- Lifetime participation in the following gambling activities:

○ Lottery	73 percent
○ Raffles	63 percent
○ Casino gambling	60 percent
○ Pari-mutuels and OTB	30 percent
○ Bingo	24 percent
○ Stock Market	23 percent
○ Cards (not at casino)	20 percent
○ Slot machines (not at casino)	18 percent
○ Pool	18 percent
○ Sports	16 percent

⁵⁶ Howard J. Shaffer, Matthew N. Hall, Joni Vander Bilt, *Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis*, Division on Addictions, Harvard Medical School, December 15, 1997.

⁵⁷ Ibid.

⁵⁸ Nathan A. Shapira, Mary Ann Ferguson, Kimberly Frost-Pineda, Mark S. Gold, *Gambling and Problem Gambling Prevalence Among Adults in Florida*, University of Florida, October 2002.

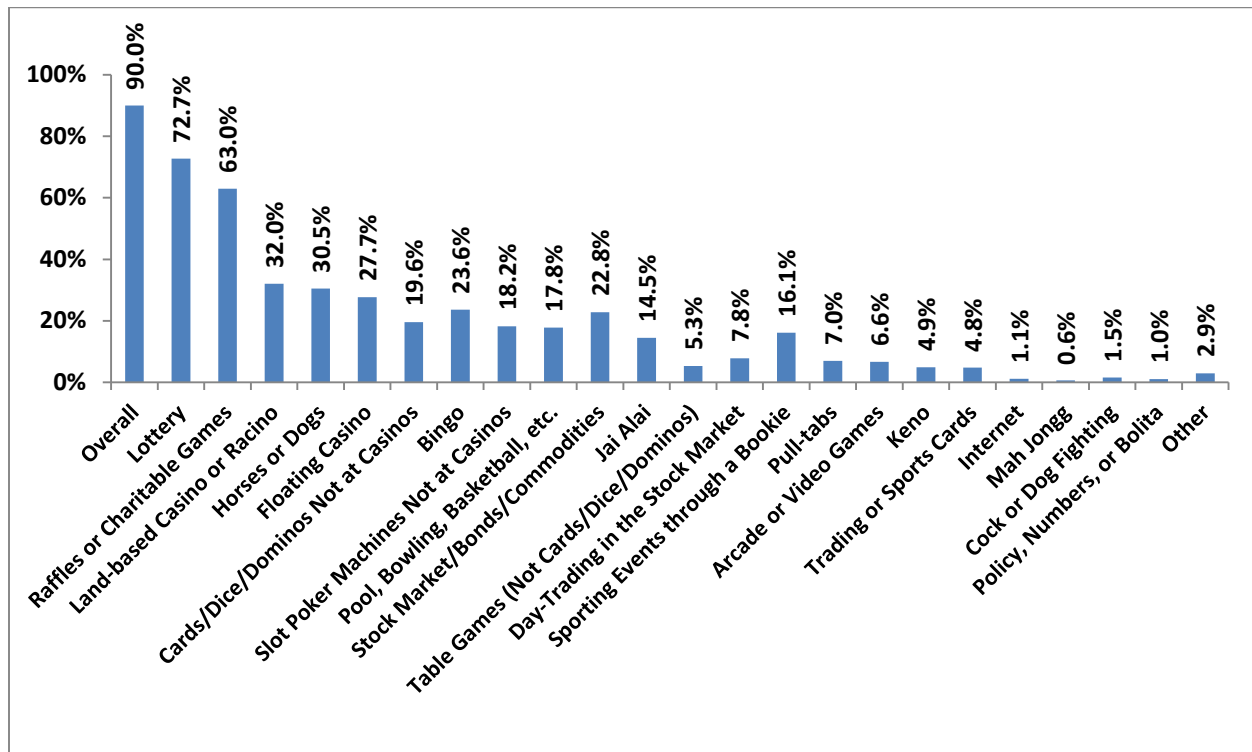
- Jai Alai 14 percent
- Lifetime prevalence was highest for lottery, raffles or sweepstakes, casino gambling, and pari-mutuels or off-track betting (“OTB”) with nearly one-third to almost two-thirds of respondents acknowledging participation in these activities on a lifetime basis.
- Past-year participation rates were highest for lottery, raffle, casino and stock market gambling, followed distantly by bingo, cards outside a casino, day trading, horses, dogs or other animals and OTB, pool, sports and slot machines outside a casino.
- Respondents participating in one or more of these gambling activities did so by:
 - Gambling in a casino 32 percent
 - Gambled at a convenience store 16 percent
 - Gambling at the supermarket 13 percent
 - Gambled in their homes 8 percent
- Males are significantly more likely to be weekly gamblers than females (30.5 percent versus 20.2 percent)
- Florida residents in the 50 to 65 age range are most likely to be weekly gamblers
- Residents 18 through 29 are least likely to gamble weekly
- SOGS problem gambling⁵⁹ among adult Florida residents:
 - Past-year problem/pathological 2 percent
 - Lifetime problem/pathological 3.6 percent
- NORC DSM problem gambling⁶⁰ among adult Florida residents:
 - Past-year problem/pathological 0.8 percent
 - Lifetime problem/pathological 1.0 percent

Lifetime gambling participation among Floridians as documented in the 2001 study is illustrated in the following chart. Note that for land-based casino or racino gambling, in 2001 virtually all of this would have taken place outside of Florida, as the only casino open at the time was the original Seminole casino in Hollywood.

⁵⁹ Pathological and problem gambling based upon South Oaks Gambling Screen (“SOGS”).

⁶⁰ Pathological and problem gambling based upon National Opinion Research Center’s DSM Screen (“NORC DSM”).

Figure 7: Lifetime gambling participation by Floridians, 2001



Source: Florida Council on Compulsive Gambling

The 2001 study was replicated 10 years later by the FCCG, with the University of West Florida collecting and analyzing the survey data. The 2011 replication survey published in January 2012, explored gambling behavior among a total of 2,500 Florida residents.⁶¹ This update provides better granularity of data for gambling prevalence but in the process makes some direct comparisons more difficult. For instance, due to a stricter definition of gambling as “placing something of value at risk in hopes of gaining something of greater value”⁶² instead of simply “bet or spent money on” as gambling was defined in the 2001 study⁶³ lifetime prevalence of gambling in the 2011 study benchmarks at only 60 percent as opposed to 90 percent in the earlier study.⁶⁴

Due to this difference in the broad definition of “gambling” it would not be appropriate to compare the two overall statistics, and the change from 90 percent to 60 percent lifetime

⁶¹ Robert J. Rotunda, Terry L. Schell, “Gambling and Problem Gambling Prevalence Among Adults in Florida: A 2011 Replication,” University of West Florida, January 2012.

⁶² M.N. Potenza, T.R. Kosten, and B.J. Rounsaville, Pathological Gambling, *Journal of the American Medical Association*, 286, p.141-144, 2001.

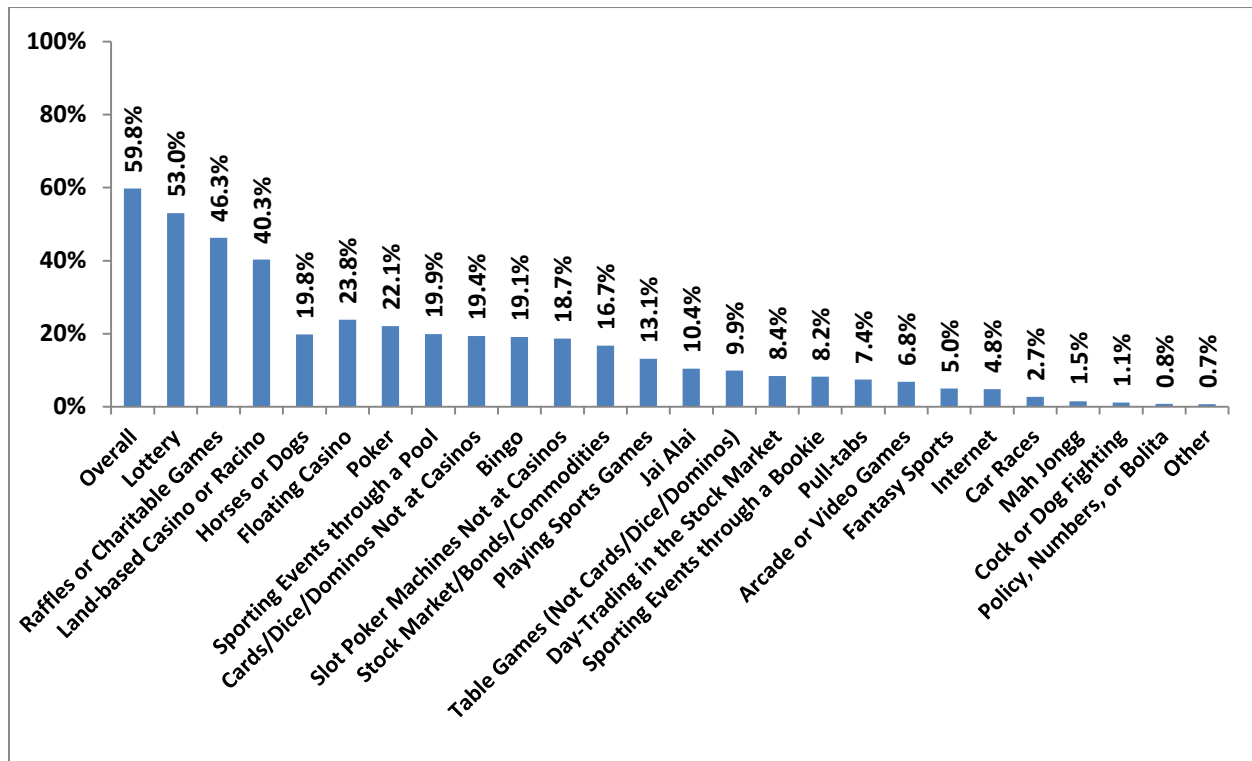
⁶³ Nathan A. Shapira, Mary Ann Ferguson, Kimberly Frost-Pineda, Mark S. Gold, “Gambling and Problem Gambling Prevalence Among Adults in Florida,” University of Florida, October 2002.

⁶⁴ Ibid.

gambling participation should in no way be construed as a decline in the overall prevalence of gambling in Florida but rather viewed as a refinement of the measurement criteria in the 2011 study and more consistent with the national rate of gambling participation.

Despite the difficulty in making overall gambling prevalence comparisons, the 2011 update agrees closely with the 2001 study in identifying lottery, raffles or charitable games, casinos, horse or dog racing, and bingo as the top five gambling activities among Florida residents. More than half of all survey respondents have played the lottery at least once in their lifetime, almost half have participated in a raffle, and 40 percent have gambled in a land-based casino.

Figure 8: Lifetime gambling participation by Floridians, 2011

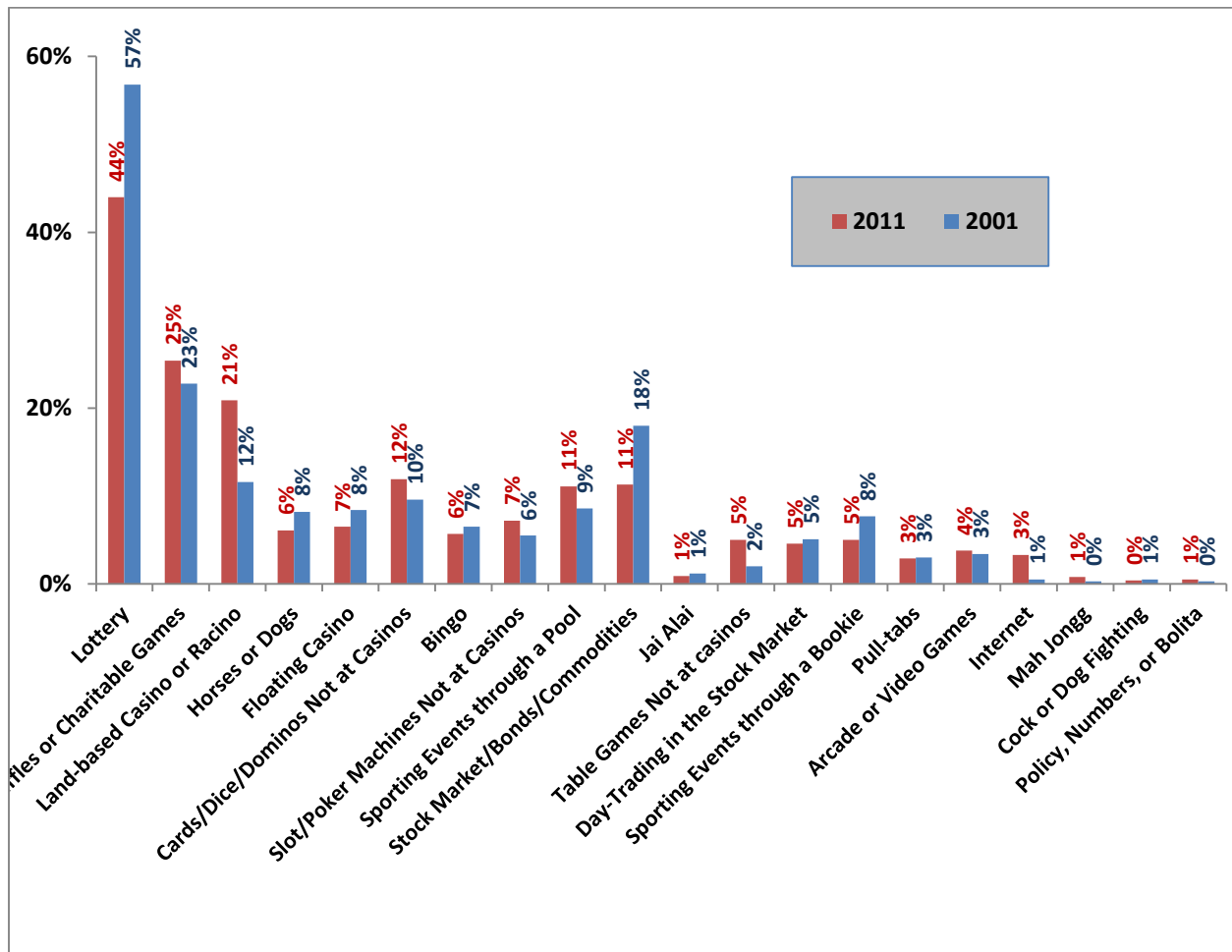


Source: Florida Council on Compulsive Gambling

Both gambling prevalence studies also break out past year gambling participation. Past-year gambling participation among Floridians is generally consistent with lifetime participation and similarly highest for the lottery, raffles or charitable games, and casinos (both floating and land-based), followed by cards/dice/dominos, horse or dog racing, and sporting events through a pool or between friends. What is most revealing about this behavioral comparison after a decade is that Florida residents report less past-year gambling participation for lottery, horse and dog racing, floating casino, the stock market, and sporting events through a bookie in 2011 than they did in 2001. Conversely, gambling participation has increased among Floridians since 2001 for

land-based casinos, cards, table games, and gaming machines found outside the casinos, sporting events through a pool, and gambling on the Internet.⁶⁵

Figure 9: Past-year gambling participation by Floridians, 2001 vs. 2011



Source: Florida Council on Compulsive Gambling

The statistics regarding prevalence have to be balanced and understood within the context of human stories, particularly among those with gambling problems. As Pat Fowler of the Florida Council on Compulsive Gambling noted in an op-ed article: “Every day we hear statistics about a variety of topics including dangerous activities, life style risk factors, and diseases of the world. Most of these statistics go in one ear and out the other. They are just numbers. But when a real story of hardship and devastation is tied to the numbers, it makes us think and consider the people behind the ratios and percentages.”⁶⁶

⁶⁵ Nathan A. Shapira, et al., and Robert J. Rotunda, Terry L. Schell, “Gambling and Problem Gambling Prevalence Among Adults in Florida: A 2011 Replication,” University of West Florida, January, 2012.

⁶⁶ Pat Fowler, “Gambling a Devastating Addiction,” *Gainesville Sun*, March 3, 2011 <http://www.gainesville.com/article/20110303/NEWS/110309814>.

2. Competitive Issues

Florida's land-based casino industry competes within itself on two levels: for customers and gaming revenue, and for attention from the Florida Legislature.

Seminole Gaming – particularly its flagship Seminole Hard Rock in Hollywood – is a well-functioning, well-capitalized and well-managed operation that has succeeded in leveraging numerous assets, from its brand to its design to its tax structure and beyond, to the point where it essentially competes to varying degrees with all of the operating racinos in Miami-Dade and Broward counties.

The racinos themselves compete with each other and with the Seminole operations on the bases of their location, access, design, customer service, loyalty programs as well as their brands and racing operations. Various other rules they must operate under, from their hours of operation to their mandated no-smoking policies, also play a role. The most visible and impactful rules that limit their competitive abilities are the tax structure they operate under, as well as their inability to match the same array of offerings as their tribal competitors. The racinos, for example, are barred from offering house-banked card games, which are popular at the Seminole casinos.

While the racino operations share those concerns, they do not necessarily share the same priorities. Some put the need for table games as a top priority, while others would place tax parity higher on the list, or at least a reduced tax rate that would help justify additional capital investment.

This absence of a uniform agenda has made it difficult for the racinos to advance their cause(s), a situation that is exacerbated by a lack of understanding among the racinos themselves as to their individual challenges. While jai alai has little in common with dog racing, and neither has much in common with horse racing, there is little visible camaraderie between operators of thoroughbred and standardbred facilities, even the thoroughbred tracks themselves can find themselves at odds.

For example, Gulfstream announced its racing schedule this year and is breaking a longstanding tradition of cooperation with other thoroughbred tracks by extending its meet year-round, thus competing directly with Calder. This is one of several related issues regarding skirmishes between the tracks, which are about 10 miles apart.

Still, the issue of conflicting agendas – what was referred to earlier by some observers as a “circular firing squad” – has created a legislative stalemate, but has also led to other curious results, as exemplified by the situation in jai alai. That sport – which originated in Spain and first appeared in the United States in Miami nearly a century ago – enjoyed its heyday of popularity between the mid-1950s and 1970s, when nine jai alai frontons opened in Florida alone.⁶⁷ Starting in the early 1990s, the sport endured a dramatic retreat in popularity, with many frontons

⁶⁷ Jai-Alai.info <http://www.jai-alai.info/history-of-jai-alai.html> .

closing.⁶⁸ Still, the sport survives, in large measure because it is tied to – and subsidized by – casino gaming and, to a lesser extent, by revenue from cardroom poker, which is roughly 4 percent of gross poker receipts.

Jai alai cannot make the same claims as the horse-racing industry that it supports numerous ancillary industries – such as racing’s ties to agriculture, as well as its span across multiple states and nations – yet its subsidies endure, with no visible efforts to eliminate, reduce or replace them.

With a jai alai fronton comes the ability to open a cardroom, a simulcasting parlor and/or a casino in Broward and Miami-Dade counties in South Florida. Those possibilities have been enough to entice investors to seek new jai alai permits even though investors realize that the jai alai portion of their investment will lose money. They hope to cover their losses with revenue from other forms of gambling. When Hamilton Jai Alai and Poker opened in December 2005, it was the first new fronton built in Florida in 22 years.⁶⁹ Its owner, Glenn Richards, told Spectrum in an interview that without the cardroom and simulcast parlor, he never would have built the fronton and it would have been closed long ago without the cardroom revenue.

Miami Jai Alai opened its slot facility on January 23, 2012. Its operator was hopeful that slot machine revenue would improve its fiscal situation. But the company has struggled to pay its debt service, resulting in a foreclosure action by its lenders. During its first six months of casino operation in 2012, it lost nearly \$7 million.⁷⁰

In addition to the prospects of cardroom and casino revenue, a jai alai license can be transferred or leased to another operator. The courts are currently reviewing whether a jai alai permit can be converted into a greyhound or racing permit. The bottom line is that jai alai permits are being issued and sought due to reasons that have nothing to do with the profitability of jai alai. Indeed, the jai alai sector as a whole sustained an operating loss of \$14 million in FY 2012.⁷¹

So why do the subsidies for jai alai endure? The elimination or reduction of jai alai subsidies would give casinos tied to frontons an unfair advantage over casinos tied to other forms of pari-mutuel wagering. The same arguments could be made for dog racing as well. If dog-racing and jai alai were allowed to “decouple” their pari-mutuel operations from their gaming operations, this would effectively lower their overall obligations, the effective tax rate they now pay. By having a lower effective tax rate, this would eliminate parity with the pari-mutuels that

⁶⁸ Ibid.

⁶⁹ “Hamilton Jai-Alai and Poker Opens Saturday,” *Suwannee Democrat*, December 21, 2005 <http://suwanneedemocrat.com/jasper/x66389098/Hamilton-Jai-Alai-and-Poker-opens-Saturday>.

⁷⁰ Brian Bandell, “Miami Jai Alai in \$84 million foreclosure,” *South Florida Business Journal*,” <http://www.bizjournals.com/southflorida/news/2012/09/14/miami-jai-alai-and-casino-in-84m.html?page=all>.

⁷¹ Spectrum review of annual audited financial statements submitted by jai alai operators to PMW.

are not decoupled, and any potential for eliminating parity can be expected to generate opposition. So, the subsidies endure because their presence helps ensure that all pari-mutuels pay a similar effective tax rate.

As a result, the current stalemate is perpetuated, and policymakers are not encouraged by the industry to address issues that could arguably advance public policies, such as the possibility of shifting some revenue-sharing that now goes to various forms of pari-mutuel wagering to general revenues.

So, while racinos do not agree amongst themselves, nor do they agree with Indian gaming operators, on most critical issues, there is largely a consensus on another aspect of gaming in Florida: opposition to gaming expansion by allowing new entrants to develop destination resort casinos.

Last year, legislation to authorize three casino resorts with capital investments of at least \$2 billion each was “killed by an unlikely coalition of opponents: Central Florida tourism interests led by Walt Disney World and the Florida Chamber of Commerce; social conservatives opposed to more gambling; and the state's pari-mutuel industry and the Seminole Tribe of Florida, whose gambling interests would have faced new competition.”⁷²

The value of this “unlikely coalition” was affirmed in a recent press release by Fitch Ratings, in which it noted: “Fitch believes there is a low likelihood that the integrated resort legislation passes in the near term, since it faces heavy opposition from STOF [Seminole Tribe of Florida], the pari-mutuels, the Orlando theme-park companies and other interest groups. If it eventually passes, Fitch expects the impact on STOF’s financial profile will be manageable. Per the Compact agreement, STOF would be able to stop making the Compact fee payments from its Broward County casinos (Hollywood Hard Rock, Seminole Hollywood Classic and Seminole Coconut Creek) which account for about half of the gaming division's revenues. Other facilities in Immokalee, Tampa and Brighton would not be directly impacted.”⁷³

3. Identifying, Capturing Markets

Depending on their location, access, neighborhoods, amount and quality of capital investment and distance from competitors, each existing Florida operation has developed its own marketing strategy and customer base.

⁷² Kathleen Haughney, “Destination casino bill is dead for this year,” *Sun-Sentinel*, February 3, 2013 http://articles.sun-sentinel.com/2012-02-03/news/fl-gambling-dies-or-lives-another-day-20120203_1_destination-casino-bill-gambling-regulation-debate-gambling.

⁷³ Fitch Ratings, “Fitch Rates Seminole's \$750MM Term Loan 'BBB-'; Affirms IDR at 'BB+'; Outlook to Positive,” April 1, 2013 <http://www.businesswire.com/news/home/20130401006002/en/Fitch-Rates-Seminole-750MM-Term-Loan-BBB->.

For example, Isle Casino Racing Pompano Park competes against the Seminole Hard Rock for its higher-end play and against Seminole Coconut Creek casino for the day-tripper business. Yet, with 1,450 slots and 48 poker tables, Isle still managed to generate \$155 million in gross gaming revenue during the past 12 months.⁷⁴

Isle generally generates about 40 percent of its annual revenue during the January-April period, thanks to the lift created by the incoming snowbird population that fills the condominiums and other housing units near the beach. In that sense, Isle is typical of many of the racino operations in South Florida.

Isle is also typical in its marketing strategy, eschewing relatively expensive mass-media options in favor of more targeted approaches, such as direct-mail and billboards. According to General Manager Rob Wyre, customers respond to the nature of the offer, which casino is providing the best deal, but also to the perception as to the looseness of the slots. Isle reports that between 60 and 65 percent of its slot play is “rated,” a term referring to players who have signed up for the loyalty program and who identify themselves as players during their visit to earn rewards.

That percentage is about 10 points higher than what is reported at Miami Jai Alai, an older property in a more urban area.⁷⁵ Miami Jai Alai management views its location as an asset that can be exploited, with heavy population centers nearby, and easy access to South Beach in Miami Beach. The property enjoys a strong police presence and patrons feel safe, according to management, which also notes that while the median player in its database is likely to be a female between 50 and 55 years of age, age drops noticeably after 2 a.m. Its demographics are also skewed heavily to the Cuban/Latino population, and to a lesser degree the Haitian population. With that in mind, management views the televising of jai alai on Telemundo and Univision as part of its marketing strategy.

Calder Casino and Race Course is also typical of the racino market in drawing most of its customers from within a 10-mile radius, and also competes against both the Hard Rock and Coconut Creek casinos, with the former being only two exit stops away on the Florida Turnpike. Calder competes against Coconut Creek for the market in the Boca Raton area.⁷⁶

Calder management believes that its close proximity to Sun Life Stadium, its Turnpike access, its equidistance of 20 miles from both Miami and Fort Lauderdale airports and its 220-acre site are assets that could benefit from additional capital investment in more amenities, but that possibility is presently precluded by the tax structure, which would prevent such investments from generating a sufficiently attractive return on investment.

⁷⁴ Interview with Isle Casino Racing Pompano Park General Manager Rob Wyre, May 1, 2013.

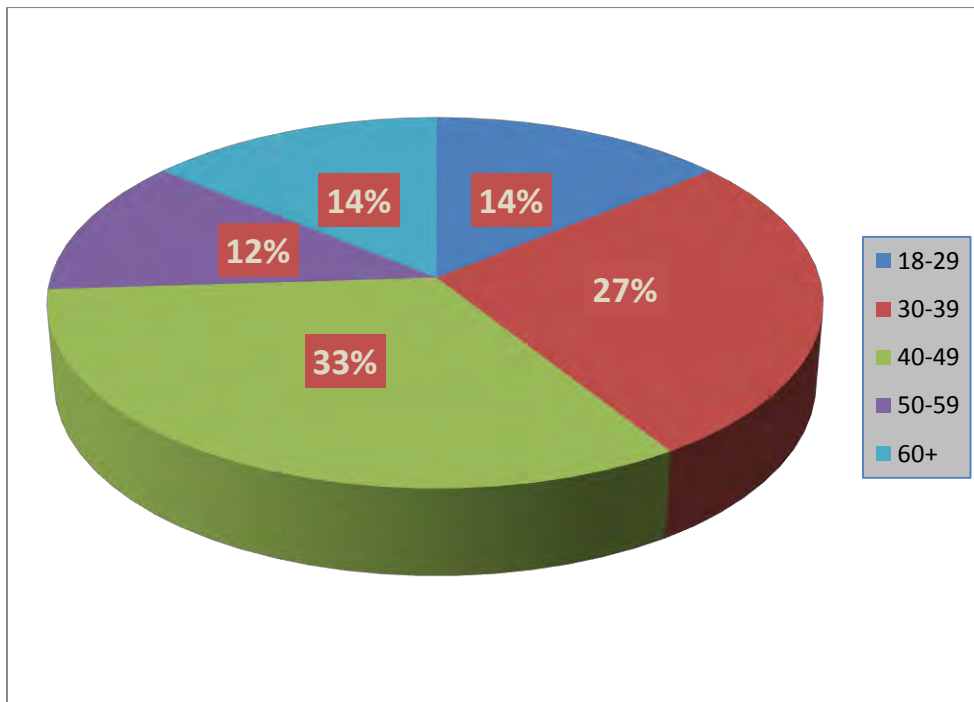
⁷⁵ Interview with Miami Jai Alai management, May 2, 2013.

⁷⁶ Interview with Calder management, May 2, 2013.

Calder competes with Gulfstream on multiple fronts, from geography to its thoroughbred racing meets, but the racinos clearly operate under different models. Gulfstream is being positioned as a racing destination and as a centerpiece for the Stronach Group, which is moving its racing operations to Florida, and which operates other tracks, including the signature Santa Anita in California. The core difference is that Gulfstream focuses more on racing, and views casino gaming primarily as a means of funding purses, which allows it to compete for top horses with tracks in northern states.⁷⁷

Gulfstream is planning significant additional capital investment (see Chapter II[B][6][c] for more detail), undeterred by the tax rate. It has already managed to attract a younger demographic, in part because of its Village at Gulfstream investment, which opened in 2009. Gulfstream took a recent snapshot of its customer base to reveal the following about its customer base:

Figure 10: Gulfstream snapshot of customer demographics



Source: Gulfstream Park

A number of the racino operators report that competition is fierce, a competition heightened by the restrictions under which they operate. Not all restrictions are gaming-related. Magic City Casino reports, for example, that any plans it might consider to add a hotel are limited by restrictions on high-rise development near the airport.⁷⁸ Managers there are also concerned about capital investment that might be impacted by future destination resort casinos, a

⁷⁷ Interview with Gulfstream management, May 2, 2013.

⁷⁸ Interview with Casino Magic management, May 8, 2013.

risk factor that discourages capital investment as well. Along that same line of reasoning, Mardi Gras management said it would consider capital investments in hotel rooms, meeting space and restaurant improvements, if it had assurances that destination resort casinos were no longer a possibility.⁷⁹

Hialeah Park is pursuing significant capital investment in its facility, in an effort to recapture much of the appeal from its 1930s heyday as a racing icon. The \$470 million project will ultimately include, in addition to the casino, a 750-room hotel, convention and entertainment and retail centers.⁸⁰ The concept was summarized in a brochure produced by Hialeah management:

(Hialeah Chairman) John Brunetti Sr.'s vision for Hialeah's rebirth is a comprehensive development that supports the rich tradition and revitalization of the entire 200-acre Hialeah Park property and to energize the hospitality industry in Florida - a place that would entertain families, adults young and old and once again become a tourist destination.

John's plan restored Hialeah's historic buildings and verdant gardens, brought horse racing back to the region and created a new entertainment experience for Miami – Dade County. Soon will come a small museum exhibiting the history of racing and the history of South Florida; the creation of an urban entertainment district for those who live, work, shop and play in the region; an outlet shopping village with restaurants; a new boutique hotel and a metro rail station and business complex for the City of Hialeah and Miami Dade County.⁸¹

The property plans to take advantage of some inherent assets, ranging from its location in the midst of a large Cuban-American population to its proximity to a train station in front of its property. Hialeah management plans to aggressively market itself throughout Latin America and Europe.⁸²

4. Profitability

Casino gambling is generally a profitable business. As service businesses without costs of raw materials and inventory or the need to invest in research and development, casino companies are efficient operations, generating high operating margins. As shown in the following table, in 2012 the four largest publicly owned casino companies generated an average margin of cash flow (as measured by the commonly used metric of EBITDA, or earnings before interest, taxes,

⁷⁹ Interview with Mardi Gras management, May 9, 2013.

⁸⁰ Hialeah Park Master Development Plan, June 29, 2012; revised May 14, 2013.

⁸¹ Ewing Cole architects, "Hialeah Park Now and Forever," undated development brochure, emailed May 29, 2013.

⁸² Interview with Hialeah management, May 9, 2013.

depreciation and amortization) to revenues of 22.1 percent, driven in great part to their Asian operations.

The next five largest gaming companies, all US regional operators, generated an average margin of 22.7 percent in 2012. This compares favorably to a comparable average margin of 16.6 percent for the four largest US publicly owned hotel operating companies as well as to the three largest cruise companies, which have an average margin of 20.2 percent.

Figure 11: Profitability of casino and leisure companies, as measured by 2012 EBITDA margin

Casino operators with Asia exposure	EBITDA/Net Revenue
Las Vegas Sands	31.4%
Wynn Resorts	27.2%
MGM Resorts	11.0%
Melco Crown	19.0%
<i>Average</i>	<i>22.1%</i>
Regional casino operators	EBITDA/Net Revenue
Penn National	23.7%
Ameristar	28.0%
Pinnacle	22.1%
Boyd	17.1%
<i>Average</i>	<i>22.7%</i>
Racino Operators	EBITDA/Net Revenue
<i>Dover Downs</i>	<i>7.4%</i>
<i>Churchill Downs Inc.</i>	<i>16.9%</i>
Indian Casino Operators	EBITDA/Net Revenue
<i>Mohegan Tribal Gaming Authority</i>	<i>23.1%</i>
<i>Seneca Gaming for 2009</i>	<i>30.0%</i>
US cruise companies	EBITDA/Net Revenue
Carnival Cruises	21.8%
Royal Caribbean	14.8%
Norwegian Cruise Line	24.0%
<i>Average</i>	<i>20.2%</i>
US lodging companies	EBITDA/Net Revenue
Marriott	9.7%
Starwood	18.4%
Wyndham	23.1%
Hyatt	15.4%
<i>Average</i>	<i>16.6%</i>

Sources: Annual Reports, YCharts.com, pro.edgar-online.com. **Note:** Seneca Gaming stopped publicly reporting results in 2010.

a. Reasons for Gaming Profitability

In terms of EBITDA return on total invested capital, a measure of profitability in relation to fixed plant, casino companies are very profitable. In 2012, the same four large gaming companies generated an average of 16.2 percent return on invested capital. The regional gaming companies generated a 13.6 percent return on the same measure. This compares to 18.8 percent for the hotel companies in this group and 2.1 percent for the three cruise companies.

Figure 12: EBITDA return on invested capital of casino and leisure companies, 2012

Gaming operators with Asia Exposure	ROIC
Las Vegas Sands	20.3%
Wynn Resorts	25.4%
MGM Resorts	5.6%
Melco Crown	13.4%
<i>Average</i>	<i>16.2%</i>
Regional gaming operators	ROIC
Penn National	14.0%
Ameristar	18.0%
Pinnacle Entertainment	14.0%
Boyd Gaming	8.3%
<i>Average</i>	<i>13.6%</i>
Racino-only Operators	ROIC
<i>Dover Downs</i>	<i>1.2%</i>
<i>Churchill Downs Inc.</i>	<i>7.5%</i>
Indian Casino Operators	ROIC
<i>Mohegan Tribal Gaming Authority</i>	<i>17.4%</i>
<i>Seneca Gaming <u>for 2009</u></i>	<i>23.6%</i>
US cruise companies	ROIC
Carnival Cruises	4.5%
Royal Caribbean	0.3%
Norwegian Cruise Lines	1.4%
<i>Average</i>	<i>2.1%</i>
US lodging companies	ROIC
Marriott	32.1%
Starwood	17.5%
Wyndham	16.9%
Hyatt	8.6%
<i>Average</i>	<i>18.8%</i>

Sources: Ycharts.com, Annual Reports. **Note:** Seneca Gaming stopped publicly reporting results in 2010.

Casinos tend to be profitable in great part due to the many barriers to entry that limit competition. First among these is the requirement for licensing. Many persons and companies will not want to get licensed due to the invasiveness of the process and its ongoing nature. Similarly, the transparency of the operations due to public reporting requirements is a deterrent to those not wanting to operate in a “fish bowl.” Possibly more importantly, most jurisdictions limit the number of gaming licenses or restrict the locales in which casinos can operate, thereby restricting the number of casinos that can open. Additionally, the capital-intensive nature of gaming, whether for the need for large and specialized physical plants or the high working capital needed to run the operations, result in a high capital cost, limiting participants only to those who can amass the great amount of capital needed. Lastly, gaming is a highly specialized cash-intensive operation requiring complex management controls regarding security, marketing and cost controls, which limits the number of capable operators.

b. Factors Affecting Profitability

Within the gaming industry, some properties are more profitable than others for a multitude of reasons:

- **Gaming tax rate** – The assessment made by the hosting jurisdictions is among the most significant determinants in casino profitability. Tax rates can range from 7 percent to 65 percent of house gaming win⁸³, sometimes with additional up-front and ongoing payments to host communities, local public benefit organizations and the state or national government that is granting the gaming license. Higher rates are generally imposed in jurisdictions that limit competition, vesting greater value in the license rights. But obviously, the higher the tax rate, the lesser the ability of the gaming operator to absorb fluctuations in other elements of the business's operating results, jeopardizing profitability and the ability to withstand competition.

The absence of a gaming tax is a key element to the profitability of many Indian casinos. Without having to pay such a tax, the tribal gaming operation has substantially more flexibility to spend more on customer marketing including complimentary services such as rooms, food and beverage, giving them a potential competitive advantage against tax-paying commercial casinos. Additionally, non-tax-paying Indian casinos can return more to their owners or use the funds to pay down debt sooner, assuring them greater financial stability. The benefits of such a tax advantage are compounded by the tribe's exemption from corporate federal and state income taxes.

- **Cost of capital** – Gaming is a capital-intensive business, and getting more so as casinos get larger and incorporate more non-gaming amenities. A gaming company's ability to attract lower cost capital can make a huge difference in its profitability as measured by return to shareholders and its ability to pay down debt. Capital costs tend to be lower for larger projects, more diversified gaming companies, and companies with a longer track record.
- **Competition** – The level of competition in a market is a major determinant in any casino's profitability. This is best illustrated in operating margin performance, as a more competitive environment will force casinos to offer more incentives to customers to get them to play at any particular casino and reduce this margin. Return on investment will similarly be affected by greater competition as the operating profit declines in relation to the original capital cost.
- **Scope and diversity of offerings** – The efficacy of investment on the variety of amenities that can accompany a casino can have a dramatic impact on overall

⁸³ "Win" and gross gaming revenue ("GGR") are effectively interchangeable terms, and both reflect the amount retained by the casino after all winning bets are paid.

profitability. A hotel that was costly to build but unable to generate a sufficiently high average daily room rate due to the need to give away rooms can bring down a project's overall profitability. Similarly, restaurants and clubs that are overbuilt relative to their standalone profit-making capability can reduce the casino project's margins. Conversely, high volume turnover at any of these offerings can lead to highly efficient businesses that may generate profits beyond what similar operations not associated with a casino could generate, thereby enhancing the overall profitability of the project.

- **Accessibility** – Gaming is often convenience-driven, so accessibility, ease of parking, and matters of ingress and egress can have a major impact on profitability. Gaming customers are often repeat visitors and are attracted to facilities that make their arrival and departure easy. A casino in a competitive market with accessibility advantages will likely be more profitable by virtue of having more customers.
- **Management quality** – Operating efficiency is critical in gaming operations due to the high fixed cost nature of the business. Maximizing revenues is a key to successful operations of such businesses, so management skill in cost control and efficient marketing can make dramatic differences in operating margins and profitability.

Profitability within the Casino

Casinos are complex operations, in that there are many types of gaming and non-gaming operations occurring within the envelope of the casino development. This mix can vary significantly depending on the type of operation – destination vs. local, slots vs. tables vs. full service, standalone casino or a project with many amenities.

Generally, slots are the biggest contributor to profitability due to their low operating cost. There is little labor involved other than maintenance since the advent of ticket-in/ticket-out technology. Additionally, individual slot machines take up little room on the floor. Before considering gaming taxes, slots-only casino operations tend to generate among the highest returns on capital as they tend to have fewer amenities. The margins on net slot revenue can vary widely depending on the tax rate and regulatory requirements.

Tables generate higher individual bets than slots and the house retains a greater percentage in the individual gaming transaction, but table game transactions are much slower than the pull of a slot machine so calibrating the mix of tables and slots relative to demand is critical. Given the amount of labor required between dealers, supervisors, security personnel and cleaners, tables are generally less profitable than slots. An exception to this might be in extraordinarily high volume markets like Macau, where table games are the largest profit makers. The margins on net table games revenue can vary widely depending on the tax rate and regulatory requirements.

Hotel rooms may generate high operating margins in markets of ultra-high occupancy, but generally, due to the high labor, maintenance and utilities cost, their contribution is not as substantial as is gaming, especially after considering the development and recurring capital cost of building, maintaining and refurbishing hotel rooms. Similarly, casino food and beverage operations tend to run with little to no departmental profit with exception for certain “celebrity chef” restaurants in destination resorts.

As between destination resort casinos and local casinos, the profitability comparison cannot simply be made as so many of the elements affecting casino profitability, mentioned above, come into play. Destination casino project profitability is dependent on the efficacy of its design and appropriateness of the mix of demand generators – hotel, spa, restaurants, and clubs – and, management’s capability to get the various elements working together efficiently. Such projects’ successes are also dependent on being able to attract visitors from farther away and get them in and out of the project.

Internet gambling is just now being tested legally in the United States, with the first Internet poker games just opening in Nevada in May. In Europe and other parts of the world, Internet gaming has proven very popular with the pure customer based gaming element generating cash flow margins of between 20 percent and 30 percent.⁸⁴ Capital cost in Internet gaming is based on technology investment or technology licensing fees (if using a third party online provider) and marketing to potential online gaming players.

5. Florida’s Competitive Landscape

Florida has an active land-based casino gaming industry, with seven Native American casino operations and six South Florida slots-only casinos at racetracks and jai alai frontons (collectively “racinos”). Three of the Native American casinos are located in Broward County and one each in Miami, Tampa, Immokalee and Okeechobee. The Seminole Tribe of Florida operates all of the Native American casinos except the Miami casino, which is owned and operated by the Miccosukee Tribe of Indians of Florida. Each of the South Florida racinos also offers poker, as do the majority of the pari-mutuel facilities elsewhere in the state. There is also one small Native American-owned slots facility in Clewiston on the southwest corner of Lake Okeechobee (a 5,600-square foot facility with a few slot machines), although we consider this to be too small to be truly defined as a casino.

Florida had a total population of 19 million in 2012, of which more than 14.6 million (77 percent) were adults (age 21+). Approximately 81 percent of the adult population (11.8 million adults) in Florida resides within a two-hour drive of an existing casino in Florida, excluding cruise ships, while 54.7 percent of the adult population (8 million adults) resides within a one-hour drive of an existing casino. The two-hour drive time figure comprises nearly all of the

⁸⁴ Thomas Allen, Morgan Stanley Report on Boyd Gaming Corporation, “Early to the Party,” p. 7, April 11, 2013.

Florida population south of Gainesville. It should be noted that the drive-time population projections presented in this report refer solely to permanent residents of Florida and do not include seasonal residents, either snowbirds or sunbirds.

Statewide, there are also a handful of casino cruises departing daily from ports throughout the state, some of which provide overnight cruises to the Bahamas and others which solely provide day-cruise excursions into international waters for gaming. The casino cruise industry in Florida is in a constant state of flux, generally downward. Ten years ago there were far more casino cruises in operation, but the industry niche has not fared well competing against land-based operations.

The racinos report their slot revenues to the State each month, which publishes the figures; Native American casino data are not published. The racinos also face a significant tax differential relative to the Native American casinos. Initially, racino slot revenue was taxed at 50 percent of net gaming revenues, excluding distributions to local governments. Effective July 1, 2011, the racino tax rate was lowered to 35 percent of GGR net of promotional credits and unclaimed tickets.

The Seminole Tribe historically (pre-2010) paid no gaming taxes, but was permitted to operate only Class II slots and Class II table games (non-house-banked games). In 2010, the Seminole Tribe signed a 20-year Compact with the State of Florida under which the Seminole Tribe agreed to pay the State an aggregate total of \$1 billion over the first five years of the Compact (effectively less than 10 percent of gross gaming revenue), and potentially as much as \$1.5 billion based on an additional revenue-sharing component for the right to offer house-banked table games at its casinos in Hollywood, Immokalee and Tampa, with an option to add table games at its Coconut Creek casino. The Compact also stipulated that all seven of the tribe's casinos could continue to operate Las Vegas-style slot machines for the next 20 years with no additional slot competition allowed outside of Broward and Miami-Dade counties, and that no Class III table games would be permitted anywhere else in the state.

Through 2012, we estimate that total GGR from the 13 racinos and Native American casinos in Florida was at least \$2.7 billion:

- The six racinos publicly reported GGR of \$527.6 million in 2012 (from an average of 6,327 slot machines over the course of the annual period and more than 140 poker tables). At year-end there were 6,393 slot machines and 147 poker tables operating.
 - Gross slot revenue was \$489.2 million (92.7 percent of GGR), while average slot win per unit per day was \$211;
 - Total cardroom revenue was \$38.3 million (7.3 percent of GGR), while average win per table per day was \$713;
 - Average GGR per gaming position per day was approximately \$198.

- We estimate the seven Native American casinos last year generated GGR of \$2.2 billion.
 - This estimate is based on two percent annual growth from the 2011 reported figure of \$2.16 billion (from 13,069 slots and 457 table games, or 15,811 gaming positions having \$374 in GGR per position per day).⁸⁵
 - It should be noted that some expansion at Native American casinos has occurred since 2011, such that in aggregate, we estimate there are were at least 14,500 slot machines and 450 table games (or 17,200 gaming positions) at Native American casinos in Florida in 2012.

The following table provides our estimated snapshot of the Florida casino industry for calendar year ended 2012 (based upon estimated results for Native American casinos, as applicable).

Figure 13: Florida casino supply and performance, 2012

	Racinos	Native American casinos	Statewide total
Estimated GGR (\$M)	\$527.6	\$2,200.0	\$2,727.6
No. Casinos	6	7	13
Slot Machines	6,393	14,500	20,893
Table Games	147	450	597
Est. Gaming Positions	7,275	17,200	24,475
Est. GGR/position/day	\$198	\$349	\$304

Source: Florida Department of Business and Professional Regulation; Spectrum Gaming Group estimates

We believe that the vast majority of GGR generated by Florida’s casinos is generated by adults residing in close proximity to a casino (i.e., within a one-hour or two-hour drive).

6. Casinos (Commercial, Racetrack, Indian)

There are nearly 1,000 casinos in the United States, and in 2012 they generated an estimated \$66 billion⁸⁶ in gross gaming revenue (“GGR”). Put another way, gamblers experienced net losses of \$66 billion in US casinos last year. Casinos are the highest-grossing form of legal gambling in the country, having surpassed lottery sales.

In this section we provide an overview of various aspects and components of an industry that, from an economic perspective, has been highly successful.

⁸⁵ Alan Meister, *Casino City’s Indian Gaming Industry Report*, 2013 Edition.

⁸⁶ Per American Gaming Association 2012 report of commercial casino revenue and 2012 4.7 percent commercial casino growth rate applied to National Indian Gaming Commission FY 2011 Indian casino revenue. Actual NIGC FY 2012 data are expected to be released later this year.

a. National Overview

The modern casino industry began in Nevada, which was the first state to legalize casino gaming, when legislation was passed and signed into law by then-Governor Fred Balzar in 1931. While casinos grew in the state it was not until 1941 when the first casino, El Rancho Vegas Hotel-Casino, was built on Highway 91. This came to be known as the Las Vegas Strip and is now home to 41 casinos generating \$6.2 billion in gross gaming revenue (“GGR”), or roughly 57 percent of the total GGR in the state of Nevada. It then took until 1976 for another gaming jurisdiction to be legalized when New Jersey voters passed a voter referendum for a constitutional amendment to utilize privately owned casinos to revitalize Atlantic City – the former “Queen of Resorts” – that was in severe decline. This dynamic – economic recovery, urban renewal or Tribal self-sufficiency – has been one of the primary driving forces in the expansion of gaming throughout the United States.

The following table provides a state-by-state breakout of the types of casino gambling. Of note, this review and analysis does not include a discussion of lotteries even though the proliferation of slot machines at racetracks is frequently operated under the auspices of the respective state lottery commissions. In the sections that follow we will provide a discussion of the various forms of casinos.

Figure 14: Types of casino operations by state

State	Commercial Casino Legalization Date	Land/Floating Commercial Casino	Racetrack Casino	Indian Casino	Cardroom	Retail Gaming
Alabama				✓		
Alaska				✓		
Arizona				✓		
Arkansas	2006		✓			
California				✓	✓	
Colorado	1990	✓		✓		
Connecticut				✓		
Delaware	1994		✓			
Florida	2006		✓	✓	✓	
Georgia						
Hawaii						
Idaho				✓		
Illinois	1990	✓				✓
Indiana	1993	✓	✓			
Iowa	1989	✓	✓	✓		
Kansas	2007	✓		✓		
Kentucky	2011		✓			
Louisiana	1991	✓	✓	✓		✓
Maine	2004	✓	✓			
Maryland	2008	✓	✓			
Massachusetts	2011	✓				
Michigan	1996	✓		✓		
Minnesota				✓	✓	
Mississippi	1990	✓		✓		
Missouri	1993	✓				
Montana				✓	✓	✓
Nebraska				✓		
Nevada		✓		✓		✓
New Hampshire						
New Jersey		✓				
New Mexico	1997		✓	✓		
New York	2001		✓	✓		
North Carolina				✓		
North Dakota				✓		
Ohio	2009	✓	✓			
Oklahoma	2004		✓	✓		
Oregon				✓		✓
Pennsylvania	2004	✓	✓			
Rhode Island	1992		✓			
South Carolina						
South Dakota	1989	✓				✓
Tennessee						
Texas				✓		
Utah						
Vermont						
Virginia						
Washington				✓	✓	
West Virginia	1994	✓	✓			✓
Wisconsin				✓		
Wyoming				✓		

Source: American Gaming Association, Spectrum Gaming Group.

Notes: Massachusetts has legalized casinos but they have yet to open. Florida does have “floating” casinos in that day-cruise vessels and cruise ships dock at state ports, but the gambling is unregulated and takes place in international waters.

Note the second column in the above table, which indicates the year that commercial casinos were legalized in each state and note that most of the legislation was passed around the time of economic recessions in the United States.⁸⁷ Of note, the legalization of casinos in Atlantic City followed the 16-month November 1973 recession (although Atlantic City was in such a depressed state that it defied economic cycles), and the eight-month July 1990 to March 1991 recession can be considered as the impetus for the legalization of casinos in Colorado, Illinois, Louisiana and Mississippi. As previously indicated, economic recovery has been one of the leading reasons states and municipalities enact gaming legislation and casino gaming has become an economic mainstay in many communities.

The gaming industry is known for substantial capital investment in facilities, with the size and scale of the investment dependent upon potential returns that are, in turn, dependent upon population and visitation, regulations and proposed tax rate, to name a few factors that are considered in such investment decisions.

This investment creates construction jobs during the development phase of the project, followed by long-term job creation to staff the properties and service the customers. As an example, Tunica County, MS, was the poorest county in the country – 53 percent living below the poverty line and 15 percent unemployment – and was referred to as “America’s Ethiopia” by Jesse Jackson in 1985.⁸⁸ The first casinos opened in Tunica in 1992 and by 1994 when *U.S. News and World Report* revisited Tunica, 95 percent of all adults were working. The county budget, which was under \$3 million before the casinos commenced operations, is just under \$50 million for fiscal year 2013.⁸⁹ Farther south in Biloxi, MS, the experience was much the same. At the opening of the new Isle of Capri casino in Biloxi, MS, CEO Bernie Goldstein is quoted in his autobiography as, “We held a jobs fair, at which we were deluged with enthusiastic applicants. One in every 10 Mississippi workers was unemployed at the time, and we were offering outstanding salaries, benefits and promotion opportunities.”⁹⁰

The commercial casino industry⁹¹ is large and growing. While this statement might seem counterintuitive given the challenges the industry faced during the economic recession and with certain companies still facing an uncertain future due to highly levered balance sheets, the fact remains that the gaming industry in the United States has expanded to new jurisdictions, invested

⁸⁷ Based on data provided by the National Bureau of Economic Research Business Cycle Dating Committee.

⁸⁸ James Popkin, “A Mixed Blessing for ‘America’s Ethiopia’,” *U.S. News and World Report*, March 6, 1994 http://www.usnews.com/usnews/news/articles/940314/archive_012562.htm.

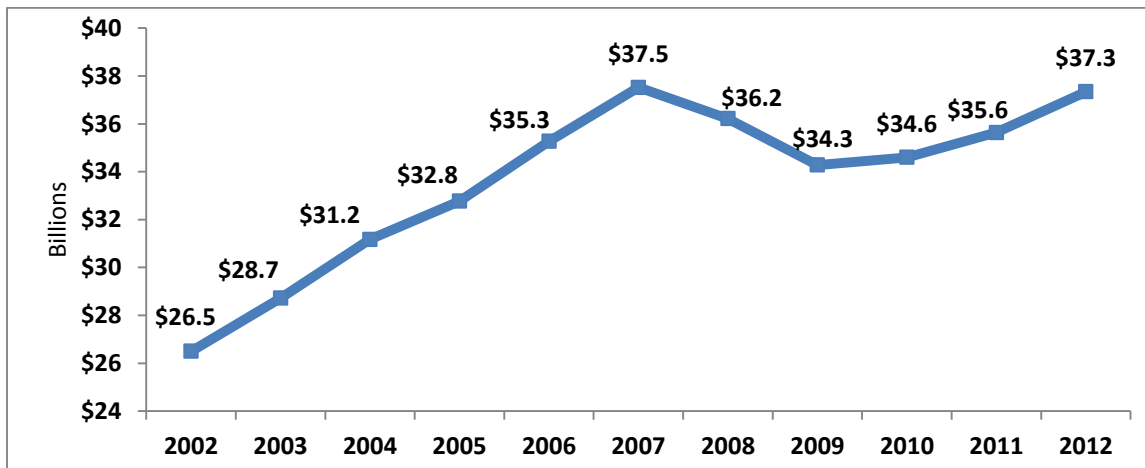
⁸⁹ Meg Coker, “Tunica County Sets \$47 Million Budget,” *The Tunica Times*, September 21, 2012.

⁹⁰ Bernard Goldstein and William Petre, *Navigating the Century; A Personal Account of Alter Company’s First Hundred Years*, p. 154-155.

⁹¹ We are defining commercial casinos as land-based, riverboat and racinos. This definition does not include Native American casinos or cardrooms.

in new facilities and realized an almost 9 percent increase in GGR since the end of the Great Recession in June 2009.⁹² The commercial industry generated \$37.3 billion in GGR in 2012, slightly below the 2007 peak revenue of \$37.5 billion. Much of this growth can be credited to the expansion of gaming to new jurisdictions – Pennsylvania, Ohio and Kansas are examples – or new properties opening in existing jurisdictions – Resorts World New York, Rivers Casino Des Plaines (Illinois) and SugarHouse (Philadelphia) – but some of it can also be ascribed to the improving economy and stabilizing housing sector providing consumers with the confidence to again visit and spend in casinos.

Figure 15: US commercial casino gross gaming revenue



Source: American Gaming Association; state regulatory agencies.

Today, 26 states have legalized commercial casinos of some type. As the casino industry expanded into other states and regions it has also evolved. To make casino gaming palatable to an electorate whose only exposure to the industry was from movies like *The Godfather* or *Bugsy*, states enacted legislation with certain requirements, such as limits on the number of gaming positions or the imposition of bet limits. In Colorado the casinos are only allowed in the former mining towns of Black Hawk, Central City and Cripple Creek, and the casinos have architecture common to pre-World War I Colorado. Iowa riverboats must replicate 19th Century Mississippi steamships.

As the electorate became more comfortable with the industry, which contributed employment and raised revenue, many jurisdictions began to loosen regulations so that the in-state casino industry could continue to be competitive against the new casino jurisdictions being enacted throughout the country. The Iowa Legislature voted in 1993 to remove bet and loss limits and allow “as many gaming tables and slots as the boats could safely fit.”⁹³ Missouri

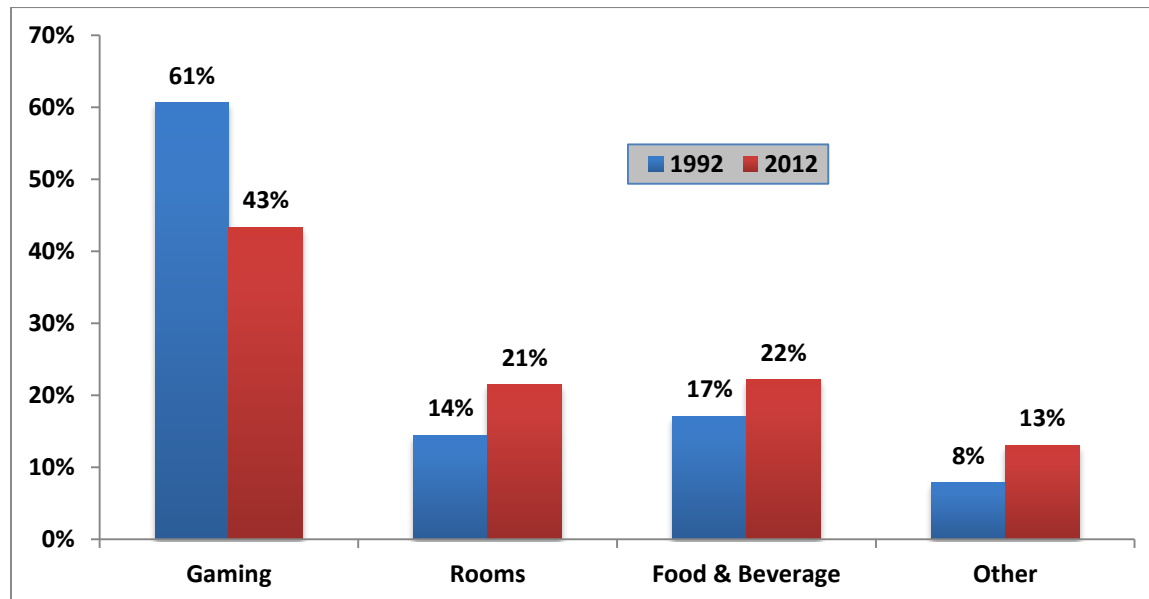
⁹² National Bureau of Economic Research Business Cycle Dating Committee.

⁹³ Bernard Goldstein, *Navigating the Century; A Personal Account of Alter Company's First Hundred Years*, p. 166.

removed its loss limits in 2008. Colorado raised the maximum bet limit from \$5 to \$100 in 2009. Over the years, the requirement that riverboats cruise has been removed in all riverboat markets.

Because of the way regulations were written with riverboats enjoying monopoly-like status surrounded by other casinos throughout the state, most of the new jurisdictions became day-trip markets where customers drove from within a small radius, typically 50 to 75 miles, and stayed at each property for only a few hours. Properties located in Las Vegas, Atlantic City and Mississippi operated under different regulations that created a critical mass of properties and lower tax rates that incited the property owners to invest in larger facilities with hotels, more expansive food and beverage offerings, nightlife, entertainment and convention space. In the early part of the industry life cycle, the majority of the casino property’s revenue and earnings came from the gaming floor. Today, and especially for these larger properties, casino gambling now represents less than half of revenue.

Figure 16: Analysis of the shift in revenue contribution, Clark County, NV, casinos, 1992 vs. 2012



Source: Nevada Gaming Control Board, for all casino locations with Gaming revenue of \$1 million or larger. As such, the data reflect some casinos we would not consider “destination resorts.” For the destination resort casinos, the non-gaming portion of revenue in 2012 would be higher. Source: Nevada Gaming Control Board, Nevada Gaming Abstract 1992 and 2012.

b. Evolution of Destination Resort Casinos

As casinos expanded to other parts of the country, they introduced the industry to new customers and drove increased visitation to Las Vegas and, to a lesser extent, Atlantic City. With the financial backing of the Wall Street high-yield bond markets, developers, particularly in Las Vegas, but also in Atlantic City and Mississippi, invested in larger and more luxurious properties. We classify these casino properties as destination resorts. The term “destination resort” is subject to interpretation, but Spectrum views it to be one with a critical mass of hotel rooms (typically 1,000 or more), restaurants, leisure activities and other resort features that has

the ability to attract out-of-market patrons for a multiple-night stay. As an example, Bellagio in Las Vegas has 3,950 guest rooms, world-class architecture, a dancing-water show, a Dale Chihuly hand-blown-glass lobby ceiling, and “O” Cirque du Soleil show to draw customers. Bellagio provides visitors with a spa, conservatory and botanical gardens, fine art gallery, nightclubs and several fine restaurants to keep the guest entertained outside of the casino.

Because there are more activities than gaming, the typical destination casino property employs a larger hotel with a higher ratio of rooms per gaming position⁹⁴ than regional or day-trip properties, which often have no hotel at all. Stated another way, at full occupancy there would likely be more people staying at a destination property than could be satisfied by the number of gaming positions. Thus, by design, there need to be more activities to keep the guests satisfied. The following table provides a snapshot of the ratio of rooms per gaming position for the destination, regional destination or day-trip property. The average number of rooms/gaming position for a destination casino is 1.75 rooms/gaming position, which is more than three times the ratio for a regional destination casino and a little over 10 times the ratio for the day-trip casino hotel. This higher room count leads to more people in a property with a longer length of stay and higher spend/visit. Just adding hotel rooms will not ensure occupancy. It is the addition of other high-end amenities that draws the customers to the property with the demand justifying the larger hotel offering.

⁹⁴ A gaming position is defined as one slot machine or one seat at a gaming table. Spectrum assumes six seats per gaming table.

Figure 17: Analysis of select casino hotels ratio of hotel room count to gaming position

Property	Slot Machines	Table Games	Gaming Positions	Hotel rooms	Rooms/Gaming Position
<i>National Destination Resorts</i>					
Bellagio	2,111	146	2,987	3,933	1.32
Mandalay Bay	1,782	82	2,274	4,752	2.09
CityCenter	1,942	129	2,716	5,744	2.11
Caesars Las Vegas	1,370	180	2,450	4,270	1.74
Wynn/Encore	2,195	240	3,635	4,750	1.31
Venetian	1,200	110	1,860	4,028	2.17
Palazzo	1,200	130	1,980	3,064	1.55
<i>Average, Destination Resorts</i>					1.75
<i>Regional Destination Resorts</i>					
Borgata	3,305	183	4,403	2,767	0.63
Harrah's Atlantic City	2,630	180	3,710	2,590	0.70
Caesars Atlantic City	2,190	180	3,270	1,140	0.35
Tropicana	2,677	116	3,373	2,079	0.62
Beau Rivage	2,046	82	2,538	1,740	0.69
L'Auberge du Lac	1,616	75	2,066	995	0.48
<i>Average, Regional Destination Resorts</i>					0.58
<i>Day-Trip Casinos</i>					
Mark Twain	649	13	727	0	0.00
Lakeside Iowa	1,027	13	1,105	150	0.14
Casino Aztar	907	30	1,087	347	0.32
Par-A-Dice	1,176	20	1,296	202	0.16
Blue Chip	1,954	42	2,206	486	0.22
Rising Star	1,300	37	1,522	190	0.12
River City	2,018	62	2,390	200	0.08
Harrah's Council Bluffs	830	20	950	250	0.26
Harrah's New Orleans	1,830	150	2,730	450	0.16
Horseshoe Tunica	1,460	90	2,000	510	0.26
<i>Average, Day-Trip Casinos</i>					0.17

Source: Company documents.

In addition to the luxury hotels and spas, destination resort casinos now boast high-end restaurants, along with the all-you-can-eat buffets for which Las Vegas was previously known. The *Forbes Travel Guide* (formerly *Mobil Travel Guide*) evaluates properties on over 500 service criteria and delivers comprehensive ratings and reviews, including the prestigious Five Star ratings. Today, there are more four- and five-star rated restaurants in Las Vegas than in any other US city, including New York, Los Angeles and Miami.

Figure 18: Four- and five-star restaurants for select cities

City	Number of 4- and 5-Star Restaurants	Example restaurants
Las Vegas	29	Twist by Pierre Gagnaire, Joel Robuchon, Restaurant Gus Savoy
New York City	21	Jean Georges, Masa, Daniel, Per Se
Los Angeles	12	Scarpetta, Melisse, Circa 55
San Francisco	12	Parallel 37, Gary Danko, Madera
Miami	10	Azul, NAOE, Palme d' Or
Orlando	5	Victoria and Albert's
New Orleans	3	The Grill Room

Source: Forbes Travel Guide and Startle.com

The amenities we cited are within the control of the property developer. Despite their beachfront settings, Atlantic City and Biloxi have been unable to compete with Las Vegas for international visitors, because of factors outside the control of the developer. Of particular importance is accessibility to each respective market. Simply put, Atlantic City International Airport and the Gulfport-Biloxi International Airport do not – and cannot with their current infrastructure – provide the same airlift as McCarran International Airport in Las Vegas. In 2012, there were 41.7 million air passengers in Las Vegas,⁹⁵ while data from the Atlantic City Convention and Visitors Authority indicate that Atlantic City International Airport has more than 1 million annual passengers⁹⁶ and Gulfport-Biloxi air passengers were less than 1 million in 2012.⁹⁷ As such, we consider Las Vegas to be a national destination market, while both Atlantic City and Biloxi are regional destinations. Because of the critical mass of casino properties, combined with hotels and other amenities these two markets can draw from further away and for a longer stay duration than the primarily day-trip riverboats, but do not draw customers from as far or as long as Las Vegas.

c. Evolution to Hub and Spoke Business Model

The evolution of commercial casino gaming in the United States has evolved over a period of decades from a policy in which some states allowed casino licensees to cluster in a central location (Mississippi, Nevada, New Jersey) to one in which most states issue fewer licenses, giving some regional exclusivity, but balancing that with a relatively high tax rate. As the following table shows, the trend for higher tax rates has been rather strong, with few exceptions:

⁹⁵ Las Vegas Convention and Visitors Authority visitor statistics
<http://www.lvcva.com/includes/content/images/media/docs/ES-YTD20128.pdf>.

⁹⁶ Atlantic City Convention and Visitors Authority, air travel information
http://www.atlanticcitynj.com/atlantic_city_international_airport.aspx.

⁹⁷ Gulfport-Biloxi International Airport <http://www.flygpt.com/Statistics/Stats.htm>.

Figure 19: Changing tax rates over time

	Casino-revenue tax rate at adoption ⁹⁸	Year gaming was established
Nevada	6.8%	1931
New Jersey	8.0%	1978
Iowa	24.0%	1991
Colorado	20.0%	1991
Illinois	50.0%	1991
Iowa	23.2%	1991
Mississippi	12.0%	1992
Rhode Island	72.7%	1992
Louisiana	21.5%	1993
Missouri	21.0%	1994
West Virginia	56.7%	1994
Indiana	40.0%	1995
Delaware	56.9%	1995
Michigan	24.0%	1999
New Mexico	46.0%	1999
New York	65.0%	2004
Oklahoma	41.8%	2005
Maine	49.1%	2005
Florida	50.0%	2006
Pennsylvania	55.0%	2007
Maryland	67.0%	2008
Kansas	25.0%	2009
Ohio	33.0%	2010
Massachusetts casinos	25.0%	2011
Massachusetts slots only	40.0%	2011

Source: State gaming commissions

Tax rates are often set on the basis of political considerations rather than through an economic analysis. This is best illustrated through the anecdotal example of New Jersey, which today is viewed as a low-tax state, but did not start out that way.

In 2010, Spectrum authored a peer-reviewed white paper on tax policy⁹⁹ that included the following:

New Jersey was the first state outside Nevada to legalize casinos, with voters approving a November 1976 referendum to authorize casinos in Atlantic City. The enabling legislation, the Casino Control Act, was approved eight months later, and the first casino

⁹⁸ Some states have different rates for table games or other exceptions. This lists only the highest rates in such states. Some rates have been subsequently adjusted, but this highlights the political trends regarding the adoption of rates.

⁹⁹ Spectrum Gaming Group, *Casino Tax Policy: Identifying the Issues that Will Determine the Optimal Rate*, November 18, 2010 <http://www.spectrumgaming.com/dl/SpectrumNationalTaxAssociation.pdf>.

opened in May 1978. The tax rate in New Jersey was set at 8 percent, which today is the second lowest in the nation (behind Nevada).¹⁰⁰

In researching this paper, we asked Steven P. Perskie – who was a member of the state Assembly in 1976 and 1977, and is widely hailed as the architect of the Casino Control Act – to provide the thought processes that guided the decision to set the rate at 8 percent. He responded with the following written comment:

‘In researching the drafting of the bill introduced in 1976, after the referendum passed, we found that the highest (combined) tax on gross revenues was 7.5 percent (in Nevada). For principally political reasons, we therefore set the initial rate for New Jersey at 8 percent. We assumed that this would inoculate us from any argument in either direction (that the tax was too high or too low), and indeed we never had to defend that decision. We didn't, at that time, make any effort to calculate the revenue estimates for the state, as we had no idea (and, as experience would show, we had *no* idea) what we would be dealing with.’¹⁰¹

That “inoculation” rationale could have been applied in many states, and demonstrates that gaming did not evolve based on market demand or player preferences. Still, the market did respond to these political arguments. In large measure, that evolution prompted the gaming industry to develop what has been termed the “hub and spoke” business model.

Under this model, one company would operate multiple properties. The higher-tax properties that are isolated in various regions would attract local business and develop databases of players within their respective regions. As these databases grow, players who earn loyalty points at these properties would be encouraged to redeem those points at “hub” properties where the tax rate is lower, and thus the profit margin is higher.

Caesars Entertainment embodies this model, and arguably pioneered the concept and developed it. Under this model, Caesars leverages its multiple locations, with spoke properties in feeder markets, and hub properties in markets such as Las Vegas and Atlantic City, as well as leveraging its loyalty program, known as Total Rewards.

In a recent column in *Global Gaming Business* magazine, Caesars Chairman, President and CEO Gary Loveman described the core of the program:

Many commentators have identified Total Rewards as the leading loyalty program in the gaming industry. We agree that Total Rewards provides Caesars with some unique advantages. No other program allows patrons to earn reward credits or points at one property in Las Vegas, for example, and redeem them inside the casino in New Orleans or at a Harrah's New Orleans strategic business partner's restaurant in the French Quarter. No other gaming company comes close to matching Caesars' distribution of 52

¹⁰⁰ New Jersey also imposes a 1.25 percent reinvestment obligation, which offers casinos a below-market return. We normally calculate the effective overall rate in New Jersey at 8.4 percent. That reinvestment obligation, however, was not imposed at the time of the statute's initial adoption.

¹⁰¹ Email from Steven Perskie, August 6, 2010.

properties in the US and on four continents around the world, all of which create marketing opportunities for our home communities.

Currently, there are more than 45 million customers in the Total Rewards database that have taken advantage of the program, 8 million of whom have been active in the past 12 months. The program provides for four tier cards or levels based on activity of the guest, with each card having a unique cadre of benefits. Patrons earn Reward Credits (points) while playing slots and table games, by making non-gaming purchases at our properties, or by using our Total Rewards-branded credit card to make purchases anywhere. These points accrue and can be redeemed across all Caesars Entertainment properties.¹⁰²

Others are moving in the same direction. The Mohegan Tribal Gaming Authority, which began with a hub property at its Connecticut casino, has since branched out to a spoke in Pennsylvania, is applying for a resort destination license in Massachusetts, is managing a casino in Atlantic City, and seeking to manage casinos elsewhere. A Florida example is the Seminole Hard Rock, which is developing plans to leverage its national brand in gaming markets such as Massachusetts and New Jersey, as well as in hotel markets. Hard Rock Chairman Jim Allen identified between eight and 15 markets that could potentially support a Hard Rock hotel casino, and as many as 50 markets that could support a Hard Rock hotel.¹⁰³ A recent article on HotelNewsNow.com noted:

Hard Rock, which now has 18 properties in its portfolio, could triple that number over the next three to five years, Chairman Jim Allen told HotelNewsNow.com. ...

Globally, Hard Rock has secured relationships with development partners in 58 countries, Allen said.¹⁰⁴

Other operators, including those with properties in Florida, acknowledge the benefits of the model. Virginia McDowell, President and CEO of Isle of Capri Casinos Inc., said:

If you look at the Caesars [Entertainment] business model, they benefited tremendously from stringing their regional operations together across the United States in their hub-and-spoke model, using that as drivers to their destination resorts. They built loyalty in the regional markets because people wanted to go to the destination markets. There's enough independent operators in Las Vegas that, to the extent you want to partner with somebody, there are lots of opportunities for us to send our customers and the regional markets have changed enough that you don't *have* to have a destination driver, although it's nice to have.¹⁰⁵

¹⁰² Gary Loveman, "Heart of the City," *Global Gaming Business*, April 30, 2013
<http://ggbmagazine.com/issue/vol-12-no-5-may-2013/article/heart-of-the-city1>.

¹⁰³ Shawn A. Turner, "Hard Rock Plans Global Hotel Push," HotelNewsNow.com, February 1, 2013
<http://www.hotelnewsnow.com/articles.aspx/9822/Hard-Rock-plans-global-hotel-push>.

¹⁰⁴ Ibid.

¹⁰⁵ David McKee, "Meet Virginia McDowell," Stiffs and Georges blog, January 18, 2012
<http://dmckee.lvablog.com/?p=8303>.

Notably, while the hub-and-spoke business is still evolving and has yet to reach its full potential, new models are emerging. Indeed, Caesars is pioneering a model that Loveman recently detailed:

Policymakers and social scientists increasingly understand that casino development projects offer the most economic and social benefits when they are specifically tailored to the needs of their host communities. The long-held view that casinos exist across a spectrum anchored at one end by neighborhood slot parlors and other forms of convenience gaming and at the other end by integrated destination resort casinos has become incomplete.

Over the past decade, a third dimension of casino gaming has emerged in North America that provides another option for urban policymakers to consider.

I call this model the city-integrated or urban resort. Its defining feature is integration with its location's pre-existing business community and attractions. In this model, the casino itself is both a physical and a metaphorical hub. Its spokes radiate not only to amenities in the casino complex itself, but also to established restaurants, shops, hotels and recreation offerings in the larger metropolitan area.¹⁰⁶

This analysis should note that, while the hub-and-spoke model is still developing, a new business model may be forming in its wake. Whether the future includes new urban resorts or traditional destination resorts, the goals for policymakers remain unchanged: Capital investment remains the key target. Consider that a destination property – a “hub” in this model – will likely employ at least 3,000 full-time equivalents, and as many as 5,000. A typical “spoke” property, which focuses on its nearby adult population, will employ about 800, and possibly as many as 1,000.

All else being equal, a destination resort is more likely to:

- Promote tourism, as it has the ability to pull adults from more distant locations.
- Withstand competition, since it typically offers more amenities.
- Generate more revenue, since it will likely penetrate a greater percentage of the adult population.

One corollary to this trend is that properties that begin life as convenience-oriented facilities, which would include so-called “spokes,” are not necessarily destined to remain in that category in perpetuity.

For example, Dover Downs – a racino in southern Delaware – responded to the threat of competition from nearby Maryland, as well as from Pennsylvania and New Jersey, by adding a 232-room hotel and conference center, along with a combination ballroom/concert hall, a new fine-dining restaurant, pool and spa. The property also added a 425-seat buffet, among other investments. That investment helped the property weather competition, by becoming something

¹⁰⁶ Loveman.

closer to a destination. The expansion has continued, and the facility now has 500 rooms, and significantly more amenities.¹⁰⁷

In Florida, Gulfstream has significantly expanded, starting with the addition of the 1-million-square-foot Village at Gulfstream, which includes 750,000 square feet of retail space. That property continues to expand, with plans now for a \$700 million expansion¹⁰⁸ that would include hotel rooms. As described by the *Sun-Sentinel*, “The development plan being formulated by The Stronach Group includes two hotels facing the track, greatly enlarged grandstand seating, as well as a standalone casino and adjacent concert hall. A giant statue of Pegasus will adorn a 4D theater nearby in a park area. But here's the most surprising aspect of a project that will cost hundreds of millions of dollars to complete: Public money is not part of the equation.”¹⁰⁹

In one sense, properties such as Dover Downs and Gulfstream are defying the basic economics of hubs vs. spokes in that such properties are burdened by relatively high tax rates, which tend to discourage such investments by reducing the potential returns on investment. Yet, in another sense, such properties recognize that such investments can protect – or even enhance – market share.

We do not suggest, however, that destination gaming resorts are panaceas, nor do we ignore the downside or the challenges they present to local communities. By definition, they increase traffic and create other demands on public services. The more successful they are in generating revenue, the more such demands increase.

In 2009, Spectrum studied in great detail the economic and social impacts of two destination resorts in Connecticut on their local communities. The two tribal properties – Foxwoods and Mohegan Sun – were responsible for \$1.2 billion worth of personal income in Connecticut, both directly and indirectly. Between 1992 and 2008, they accounted for about 12 percent of the net new job growth in Connecticut.¹¹⁰

At the same time, however, DUI arrests were up significantly. One town reported that such arrests doubled since the first casino opened in 1992, and three local communities reported that 20 percent of those arrested for DUI – including one motorist arrested for manslaughter for

¹⁰⁷ Reuters, Dover Downs Entertainment company profile <http://www.reuters.com/finance/stocks/companyProfile?symbol=DDE> (accessed May 14, 2013).

¹⁰⁸ Interview with Gulfstream executives, May 2, 2013.

¹⁰⁹ Craig Davis, “Gulfstream plans major expansion in pursuit of Breeders’ Cup, year-round racing,” *Sun-Sentinel*, November 27, 2012 http://articles.sun-sentinel.com/2012-11-27/sports/fl-gulfstream-park-expansion-1128-20121127_1_breeders-cup-gulfstream-park-race-track.

¹¹⁰ Spectrum Gaming Group, “Gambling in Connecticut: Analyzing the Economic and Social Impacts,” June 22, 2009, p. 8 http://spectrumgaming.com/dl/june_24_2009_spectrum_final_final_report_to_the_state_of_connecticut.pdf.

causing a fatal accident by driving the wrong way on a highway – acknowledged that they had their last drink at one of the casinos.¹¹¹

Spectrum also noted that “with many casino workers unable to afford housing in southeastern Connecticut, some landlords have converted single-family homes into boarding facilities. The practice is not only illegal, it is unsafe as well.”¹¹² Such examples demonstrate that destination resorts present both challenges and opportunities.

d. Florida’s Racinos

Of the existing 27 pari-mutuel facilities, six currently offer slot machines (the “racinos”). Furthermore, of Florida’s pari-mutuel locations, slot machines are only authorized at existing pari-mutuel facilities in Broward and Miami-Dade Counties.¹¹³ Operations at Florida’s racinos are comprised of both slot machines and cardroom operations.

The following table shows how long each racino has been operational, along with number of slot machines and poker tables (all information as of the end of 2012).

Figure 20: Florida racino overview

Racino	Casino Miami	Magic City	Calder	Gulfstream Park	Mardi Gras	Pompano Park	FL TOTAL
Month Opened	Jan-12	Oct-09	Jan-10	Nov-06	Dec-06	Apr-07	n/a
# Full Months Open	11	38	35	73	72	68	n/a
Location (County)	Miami-Dade	Miami-Dade	Miami-Dade	Broward	Broward	Broward	n/a
Slot Machines	1,058	801	1,204	853	1,057	1,420	6,393
Poker Tables	12	18	29	20	30	38	147

Source: Florida Department of Business and Professional Regulation

A seventh racino is scheduled to begin operating later this year at Hialeah Park.

e. Native American Casinos

Nationally

Congress passed the Indian Gaming Regulatory Act of 1988 (“IGRA”) because many Native American nations and tribes had established gaming activities but federal laws at the time did not establish a clear regulatory framework for the conduct of such games. IGRA was passed to fulfill certain goals, including promoting tribal economic development, self-sufficiency and strong tribal governments; maintaining the integrity of the Native American gaming industry;

¹¹¹ Ibid., p. 13.

¹¹² Ibid., p. 14.

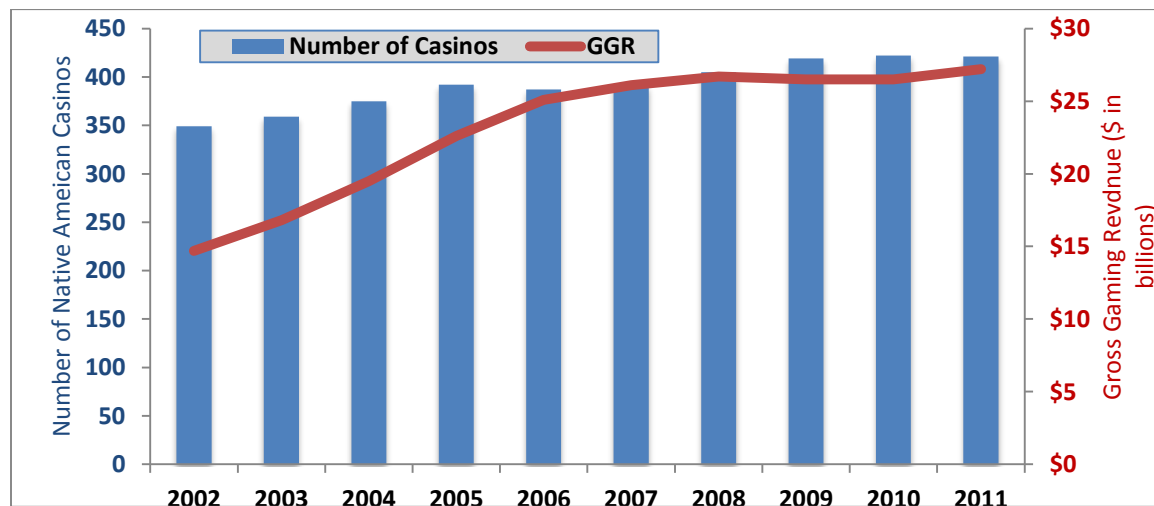
¹¹³ Florida Department of Business and Professional Regulation, Division of Pari-Mutuel Wagering <http://www.myfloridalicense.com/dbpr/pmw/faq-slots.html> (accessed April 29, 2013).

and ensuring that tribes are the primary beneficiaries of their gaming activities.¹¹⁴ Under IGRA, games are classified into three categories: Class I, Class II and Class III.

- Class I gaming includes social games solely for prizes of minimal value or traditional forms of Indian gaming engaged in by individuals as part of tribal ceremonies or celebrations.
- Class II gaming includes bingo, pull-tabs, lotto, punch boards, tip jars, certain non-banked card games (if such games are played legally elsewhere in the state), instant bingo and other games similar to bingo, if those games are played at the same location where bingo is played.
- Class III gaming, meanwhile, includes all other forms of gaming, such as slot machines, video casino games (video blackjack and video poker), table games and other commercial gaming, such as sports betting and pari-mutuel wagering. To offer Class III games, federally recognized Indian tribes are required to negotiate a compact with the state in which they operate and attain approval of the compact by the US Department of the Interior.¹¹⁵

As in the commercial casino industry, the type of Native American casino is also varied, with the Seminole Hard Rock casinos, Foxwoods and Mohegan Sun being examples of national destination resorts. According to the National Indian Gaming Commission, there were over 420 Native American casinos generating more than \$27.2 billion in GGR in 2011.

Figure 21: Size of the Native American casino industry



Source: National Indian Gaming Commission

¹¹⁴ Indian Gaming Regulatory Act, National Indian Gaming Commission http://www.nigc.gov/Laws_Regulations/Indian_Gaming_Regulatory_Act.aspx.

¹¹⁵ Adam Steinberg, "Know Your Odds: Gaming Industry Investment Primer," Morgan Joseph & Co. investment research report, p. 76, January 9, 2006.

Florida

Florida's eight Native American casinos are spread throughout five counties (Broward, Collier, Hillsborough, Glades, and Miami-Dade), while Broward is home to three of the Native American casinos.

Native American casinos in Florida, for the most part, provide a full-service gaming experience, although non-card games such as craps or roulette are not allowed. The Indian casinos, however, are not subject to state regulation and thus have substantial competitive advantages over racinos including allowing patrons to smoke, offering live table games (except at Miccosukee, which is a Class II property) and paying no direct gaming tax.¹¹⁶

While there are two federally recognized tribes in Florida, the Seminole Tribe is dominant, and indeed Seminole Gaming is largely viewed as more than a Florida operation. As noted in Chapter II(B)(6)(c), by virtue of its ownership of Hard Rock International the Tribe is branching out with Hard Rock-branded casinos in other states. Notably, the Seminole Tribe has secured investment-grade rating for its debt, as noted by Fitch, a major rating agency:

Fitch believes that STOF's [Seminole Tribe of Florida] operating profile and credit metrics are consistent with 'BBB-' IDR (issuer default rating), and a further track record of fiscal prudence by the tribe may result in an upgrade of the IDR to 'BBB-' within the next 12-24 months. Specifically, an investment grade IDR can be supported by STOF's ... solid competitive position ... (and) strong credit metrics.¹¹⁷

At least two other Indian tribes are working through various legal channels to commence Florida gaming operations:

- The Poarch Band of Creek Indians, which is based in Atmore, AL, has land in Escambia County, which is held in trust by the US government, and also owns, or has options to own, or agreements to control 10 pari-mutuel permits along the Interstate 10 corridor between Pensacola and Jacksonville. The Poarch Band is seeking to negotiate an agreement, which could include revenue-sharing, with the State to operate Class II gaming (i.e., bingo-based slots and non-house-banked games) at the pari-mutuel facilities. "We believe that such an intergovernmental agreement between the Poarch Band and the State of Florida can be crafted in a legally viable manner that is allowable under State law, avoids the need for federal approvals and avoids violation [of] the Seminole Compact," according to attorney Steven Paul McSloy.¹¹⁸ A market

¹¹⁶ The Seminole Tribe of Florida Compact with the State of Florida provides for payments of approximately \$1 billion over five years.

¹¹⁷ "Fitch Rates Seminole's \$750MM Term Loan 'BBB-'; Affirms IDR at 'BB+'; Outlook to Positive," April 1, 2013 <http://www.businesswire.com/news/home/20130401006002/en/Fitch-Rates-Seminole-750MM-Term-Loan-BBB->.

¹¹⁸ Letter from Steven Paul McSloy of Dentons US LLP to Jay Corris, CEO of PCI Gaming, May 21, 2013.

study showed that Poarch Band gaming at Pensacola Greyhound Track, Creek Entertainment Gretna, and Jacksonville Racing could generate \$1 billion in net revenue.¹¹⁹ The tribe currently operates three casinos (with electronic gaming machines only) in Alabama.

- For the past decade, the Muscogee Nation of Florida has been pursuing federal recognition by act of Congress in order to initiate gaming operations as a means of economic development. Tribal landholdings are well positioned to offer casino gaming in an underserved tourism market close to Gulf beaches in the Florida panhandle, where the nearest competition are greyhound tracks in Pensacola and Ebro. In 2003 US Representative Jeff Miller, Republican from Florida, introduced House Resolution 323, The Muscogee Nation of Florida Federal Recognition Act (“H.R.323”).¹²⁰ This bill, which has never been voted on, was assigned to the House Natural Resources, Indian and Alaskan Native Affairs Committee on January 13, 2013.¹²¹ It has received repeated extensions over the past 10 years. The last extension was granted in December 2012, and expires in early June. It is our understanding that current prospects for recognition through Congress are not promising.

7. Pari-mutuel

a. National Trends

In pari-mutuel wagering, bettors bet against each other. The house has no stake in the outcome. The house takes out a portion of the amount wagered, which in racing is known as handle. Racetracks typically retain about 20 percent of handle.

National trends mirror those of Florida. Live handle in calendar year 2010 (the most recent year for which data are available) accounted for just 12 percent of total handle for horse racing, 29 percent for greyhound racing and 42 percent for jai alai handle.¹²² For the 10-year period ending in 2010, pari-mutuel wagering fell from \$18.3 billion in 2000 to \$11.5 billion in 2010, a decline of 37 percent. States’ share of the revenue fell from \$470 million to \$191 million, a decline of 59 percent.¹²³ The Association of Racing Commissioners International (“ACRI”) no longer reports attendance figures because it says the figures are no longer meaningful. Most jurisdictions no longer report them, and of those that do, they are “increasingly inaccurate,”

¹¹⁹ May 2013 Market Analysis prepared by Pro Forma Advisors LLC.

¹²⁰ Congress, Bill, HR 323, [www.govtrack.com http://www.govtrack.us/congress/bills/113/hr323](http://www.govtrack.com/http://www.govtrack.us/congress/bills/113/hr323).

¹²¹ Ibid.

¹²² Spectrum review of Association of Racing Commissioners International, *Pari-Mutuel Racing Annual Reports*. State revenue includes any revenue that state governments realize through pari-mutuel activity.

¹²³ Ibid.

according to ACRI. That comment made in the ACRI 2010 report offers a telling statement about the declining popularity of live pari-mutuel wagering.

Florida only reports paid attendance. Operators who choose to charge for admission must collect an admission tax for the state. There is no requirement that a facility charge for admission. And in Florida, admission is free at the state’s harness track at Pompano, at jai alai frontons and at most of the state’s 16 greyhound tracks.¹²⁴

The following table puts pari-mutuel attendance nationally in perspective. Note that attendance for horse racing – the largest component by far of pari-mutuel wagering – attracts fewer than 3 percent of adults, although that percentage actually rose by two-tenths of 1 percent over the past four years.¹²⁵

Figure 22: Participation by adults in selected activities

Activity	Participated in the last 12 months (in thousands)		Frequency of Participation							
			Two or more times a week		Once a week		Two to three times a month		Once a month	
	No.	%	No.	%	No.	%	No.	%	No.	%
Adult education courses	16,640	7.3	3,116	1.4	1,973	0.9	762	0.3	1,312	0.6
Attend auto shows	19,346	8.5	313	0.1	337	0.2	557	0.2	721	0.3
Attend horse races	6,654	2.9	159	0.1	177	0.1	155	0.1	379	0.2
Attend rock music performances	25,176	11.0	187	0.1	173	0.1	730	0.3	1,136	0.5
Backgammon	4,234	1.9	435	0.2	366	0.2	416	0.2	486	0.2
Billiards/pool	19,468	8.5	975	0.4	1,432	0.6	2,125	0.9	2,063	0.9
Bird watching	13,793	6.1	6,101	2.7	1,338	0.6	1,169	0.5	876	0.4
Book clubs	5,747	2.5	285	0.1	234	0.1	419	0.2	2,732	1.2
Chess	6,896	3.0	549	0.2	533	0.2	823	0.4	576	0.3
Concerts on radio	6,441	2.8	1,308	0.6	747	0.3	548	0.2	572	0.3
Cooking for fun	50,243	22.0	19,162	8.4	7,495	3.3	6,795	3.0	4,415	1.9
Crossword puzzles	29,996	13.2	12,866	5.6	3,136	1.4	2,811	1.2	2,674	1.2
Dance/go dancing	20,995	9.2	1,636	0.7	2,162	1.0	2,728	1.2	2,964	1.3
Dining out	112,477	49.3	20,158	8.8	25,173	11.0	26,644	11.7	15,686	6.9
Fantasy sports league	8,969	3.9	2,855	1.3	1,559	0.7	372	0.2	330	0.1
Furniture refinishing	6,292	2.8	201	0.1	79		359	0.2	406	0.2
Go to bars/night clubs	43,513	19.1	3,133	1.4	4,846	2.1	7,428	3.3	6,430	2.8
Play bingo	10,271	4.5	754	0.3	1,095	0.5	811	0.4	1,342	0.6
Play cards	46,190	20.3	5,679	2.5	4,969	2.2	6,400	2.8	7,567	3.3
Reading comic books	5,557	2.4	1,161	0.5	636	0.3	886	0.4	527	0.2
Sudoku puzzles	26,540	11.6	10,265	4.5	2,505	1.1	3,159	1.4	2,495	1.1
Trivia games	11,872	5.2	1,891	0.8	1,327	0.6	1,397	0.6	1,490	0.7
Woodworking	10,202	4.5	1,714	0.8	965	0.4	1,631	0.7	1,443	0.6
Word games	22,147	9.7	7,768	3.4	2,709	1.2	2,817	1.2	1,899	0.8
Zoo attendance	28,148	12.3	189	0.1	239	0.1	632	0.3	2,112	0.9

Source: US Census Statistical Abstract of the United States

¹²⁴ Florida Division of Pari-Mutuel Wagering, review of *Annual Reports*.

¹²⁵ Statistical Abstract of the United States
<http://www.census.gov/compendia/statab/2012/tables/12s1240.pdf>.

Certainly, the creation of new wagering opportunities over the last several decades has given more adults more options. The history is summarized well in this excerpt from a report by Cummings Associates:

When they were first authorized in some states in the 1930s, and for a long golden age thereafter, race tracks essentially had a monopoly on legal gambling on a commercial scale. They were legalized because states needed money. During the economic collapse of the Great Depression, a number of states turned to legal gambling as a source of revenue. Nevada legalized casinos (in 1931), but every other state chose pari-mutuel betting on horse racing, and in a few states, on greyhound racing as well. This occurred, moreover, in the context of relatively simple leisure economies which, aside from movies and major league baseball, offered few alternative forms of commercial entertainment. In these circumstances, race tracks were by and large highly profitable. As businesses, horse tracks had little trouble developing large numbers of customers and were able to pay high rates of gambling 'privilege' taxes. They lived in a sheltered world.

Over the past thirty years, however, the economic environment has changed dramatically. Competing forms of legal gambling have proliferated, starting with state lotteries in the late 1960s. Ironically, the same force that legalized racing led to lotteries: states needed money. Thirty-nine states now have them, and all the provinces of Canada. ...

Then came an explosion of full-scale casino resort hotels in Las Vegas, New Jersey, Mississippi, Canada and Connecticut. These now attract tens of billions of dollars in consumer spending each year, with large amounts also spent on 'limited' casino gaming on riverboats in the Midwest, small casinos in Colorado and South Dakota, VLTs ('video lottery terminals') or slot machines at race tracks in seven states, and on a widespread basis in several Western states and much of Canada, on cruise ships operating out of many states, and at casinos on Indian lands across wide stretches of North America. ...

In the 1980s, racing's legal gambling competition more than doubled in size; in the 1990s, it more than doubled again. Over the same period, the U.S. leisure economy grew enormously and became vastly more diversified. Many leisure and entertainment activities are available today that did not exist in the 1930s, or even in the 1960s. Cable television, VCRs, DVDs, inexpensive air travel and the related (but not-so-inexpensive) theme park resort industries, major-league football and basketball and a host of other diversions now compete much more intensely with horse racing for the leisure dollars available.¹²⁶

¹²⁶ Cummings Associates, "Analysis of the Data and Fundamental Economics Behind Recent Trends in the Thoroughbred Racing Industry," p. 7-8, July 17, 2004

http://www.nationalhbpa.com/resources/cummings_report7-17-04.pdf.

b. Florida

Florida first authorized pari-mutuel wagering in 1932.¹²⁷ In 2010, the state accounted for 59 percent of the nation's pari-mutuel wagering.¹²⁸ The Department of Business and Professional Regulation ("DBPR"), through its Division of Pari-Mutuel Wagering ("PMW"), oversees gaming in Florida.

Pari-mutuel activities in Florida include thoroughbred horse racing, harness horse racing, quarter horse racing, greyhound racing and jai alai games. In addition, pari-mutuel facilities can operate cardrooms, which can only be operated by the holder of a pari-mutuel license (though card games do not involve pari-mutuel wagering). Cardrooms cannot open in a facility unless live racing or jai first takes place.¹²⁹ Events at racing and jai alai facilities are simulcast to other pari-mutuel facilities in Florida and to out-of-state venues.

Florida is the only state with live jai alai games. It is one of seven states with greyhound racing. Florida accounted for 64 percent of the nation's live greyhound races in 2010.¹³⁰ Since 1993, 10 states have outlawed greyhound racing.¹³¹

Florida allows slot machine casinos, also known as racinos, at pari-mutuel facilities in Miami-Dade and Broward counties. Numerous pari-mutuel operators in other areas of the state told us that they too need slot machine casinos to "even the playing field," as they are unable to compete with racinos in and outside of Florida that use slot revenue to enhance purses, which, in turn, allow racinos to attract higher quality racing animals and make significant capital expenditures to improve their facilities.

As of April 3, 2013, there were 27 pari-mutuel facilities in Florida (plus inter-track at Ocala) that accepted bets on live races or jai alai games. They included 14 greyhound tracks, six jai alai frontons, three thoroughbred tracks, one harness track and five quarter horse tracks. Twenty-four of them had cardrooms. Six had casinos. Ocala Breeders' Sales in Ocala and Bestbet in Jacksonville operate simulcast parlors without live pari-mutuel racing. The overall financial trend for Florida pari-mutuels has been on a steady downward spiral. Many operations have sustained steep operating income losses, and those losses would have been much greater if it were not for racino and cardroom revenue. The worst-performing sectors have been jai alai and greyhound.

¹²⁷ Florida PMW, *Annual Report, FY 2012*, p. 2.

¹²⁸ Association of Racing Commissioners International, *Pari-Mutuel Racing 2010*, p. 1.

¹²⁹ Section 849.086 (5a), Fla. Stat.

¹³⁰ Association of Racing Commissioners International, *Pari-Mutuel Racing 2010*, p. 39.

¹³¹ Danny Valentine, "Proposal could hasten decline of greyhound racing," *Tampa Bay Times*, April 28, 2011 <http://www.tampabay.com/news/business/proposal-could-hasten-decline-of-greyhound-racing-in-florida-nation/1166550>.

In FY 2012, Florida's pari-mutuel facilities had a combined overall operating profit of just \$1.9 million. Thirteen had losses, with the largest of \$21.6 million at the combined Fort Pierce/Miami Jai Alai operation. The biggest operating profit was \$16.4 million at Flagler Greyhound Track, which also operates slot machines.¹³²

Pari-mutuel operations involve wagering on pari-mutuel events. The wagers occur at the track on live events or at track simulcast rooms. Those operations by themselves sustained an operating loss of \$50 million. Only eight facilities were able to show an operating profit from their pari-mutuel operations.¹³³ The largest loss of \$11.6 million was at Fort Pierce/Miami; the highest profit of \$6.3 million was at Gulfstream, a thoroughbred track with slot machines.

State tax revenue from such operations is fraction of what it once was. From FY 1985 to FY 2012, it fell from:

- \$29.7 million to \$378,000 for jai alai, a reduction of 99 percent¹³⁴
- \$77.2 million to \$3.7 million for greyhound racing, a reduction of 99 percent¹³⁵
- \$12.5 million to \$7.6 million for horse racing, a reduction of 39 percent¹³⁶

The overall reduction in state revenue went from \$119.4 million to \$11.8 million, decline of 91 percent.¹³⁷

Slot machine casinos accounted for 77 percent of state gaming revenue in FY 2012. All of that slot machine money, \$144 million, was given to the state Department of Education. Unclaimed jai alai and greyhound winning tickets totaling \$1 million was also given to that same state agency. State tax revenue from cardrooms was split between the Pari-Mutuel Wagering Trust Fund and the General Revenue Fund. In accordance with section 849.086(13)(h), Florida Statutes, one-quarter of the moneys deposited into the Pari-Mutuel Wagering Trust Fund must be distributed to counties and municipalities that approved the cardroom. In October 2012, the division distributed approximately \$1,643,208 to the counties/municipalities from cardroom gross receipts.¹³⁸

¹³² Florida PMW, Independent Auditor's Report for Pari-Mutuel Permitholders, FY 2012.

¹³³ Ibid.

¹³⁴ Florida PMW, custom report, May 10, 2013.

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Florida PMW, *Annual Report*, FY 2012, p. 18

Issues with PMW Annual Reports

In the course of our research, we discovered that purse numbers for the Isle of Capri at Pompano harness track were grossly overstated in PMW annual reports for fiscal years 2009 through 2012. PMW stated to us by email that it will be revising annual reports for Pompano to reflect the accurate figures. The mistakes were discovered when we asked standardbred horsemen to review purse information. The horsemen claimed that the numbers were wrong, and PMW asked the Pompano's comptroller to review them. The Pompano comptroller then acknowledged that errors had been made, and PMW said that the annual reports will be amended. The agency makes no effort to independently verify the information. The errors for the Isle of Capri at Pompano data raise issues as to whether other mistakes could have occurred at other pari-mutuel facilities.

In an email to Spectrum on May 21, 2013, PMW officials acknowledged that annual PMW reports fail to include out-of-state generated simulcast revenue. Gulfstream, for example, might send its signal to Yonkers, and revenue from wagers bet on Gulfstream races at Yonkers would not appear in PMW annual reports. The result is a significant understatement of simulcast revenues. To illustrate the point, PMW's 2012 report lists simulcast and intertrack handle for Gulfstream at \$102 million. But missing was out-of-state generated simulcast handle of \$605,319,440, an amount that is nearly six times the reported simulcast handle in the PMW FY report of 2012.¹³⁹ Other racing jurisdictions, such as New Jersey, include out-of-state export handle in their annual reports. The failure of PMW to indicate in its annual report that handle figures fail to include this category results in an incomplete picture of racing wagering in Florida. In a May 23 email to Spectrum, PMW explained it does not do so because the wagers made outside of Florida are beyond its regulatory authority and ability to impose taxes. PMW officials also noted they are unable to verify the data. Also unreported in out-of-state generated simulcast revenue is the amount through the Oregon hubs, which are companies that allow gamblers to place bets on races through the Internet or a cell phone.

PMW includes a category in its annual report identifying the amount of purses accounted for through "pari-mutuel" operations. Our research indicates that the number also includes financial contributions made by the operator. For example, the Melbourne Greyhound track contributed \$185,463 from pari-mutuel operations toward purses, according to the FY 2012 report.¹⁴⁰ Yet the annual report shows that the entire handle was only \$162,138, and only half of that goes into purses.¹⁴¹ If the operator is making a contribution toward purses, reports should indicate that the figure includes such contributions.

¹³⁹ Interview with Kent Stirling, Executive Director, Florida Horsemen's Benevolent and Protective Association, May 22, 2013.

¹⁴⁰ Florida PMW, *Annual Report*, FY 2012, p. 26

¹⁴¹ *Ibid*, p. 13.

It is critical for policymakers to have information relating to regulatory costs for each pari-mutuel sector. PMW advised that it cannot break down costs by sector. We note that Rep. Dana Young, R-57, asked the state agency for regulatory financial data relating to greyhound racing. In a letter dated August 19, 2011, Ken Lawson, Secretary of the Department of Business and Professional Regulation, said the State could identify only costs directly attributable to all live greyhound racing, which he said totaled \$1.88 million for FY 2011. That figure is slightly more than the revenues of \$1.85 million that live greyhound racing generated. But the cost figure did not include any allocation for salaries and benefits paid to 66 PMW employees or expenses they incurred. Those two categories alone totaled \$4.7 million. The Legislature needs to have detailed information concerning regulatory costs by sector in order for it to make informed decisions concerning the pari-mutuel industry.

Cutting Costs

Some operators say they have been adversely affected by a requirement that forces them to run a minimum number of racing performances (eight races make up a performance). Two greyhound tracks are conducting more than 350 performances a year, close to what they ran nearly 20 years ago because of the 90 percent rule. This rule requires pari-mutuel operators with cardrooms to conduct at least 90 percent of the live performances that were held the year before their cardrooms opened.¹⁴² For many operators, that was 1996. Florida had 3,857 live greyhound performances in 2010; West Virginia, the next-highest state, had 552.¹⁴³ The required minimum number of performances varies from sector to sector, and then within a specific sector depending on when a facility opened. This issue will be addressed in more detail later in the report.

Some operators have responded to the cost of doing business by reducing race cards and, in the case of jai alai, the number of players on a roster. Others have used quarter horse racing permits to run barrel racing, which prompted an administrative law judge to call the offering “a new species of racing.” The judge ruled that PMW had no authority to issue a permit for barrel racing. Other operators have proposed staging greyhound races with two dogs in each race¹⁴⁴ and jai alai games that involve two players playing over and over.¹⁴⁵

Barrel racing is being run at Greta in Gadsden County. It involves rodeo-type racing in which horses are timed as they run around separate obstacle courses. The winner is the one with

¹⁴² Section 849.086 (5 b), Fla. Stat.

¹⁴³ Association of Racing Commissioners International, *Pari-Mutuel Racing 2010*, p.39.

¹⁴⁴ National Greyhound Association, “Two-dog race plan condemned,” February 13, 2013 <http://ngagreyhounds.com/issue/january-february-2013/article/two-dog-race-plan-condemned>

¹⁴⁵ Carlos Medina, “Area Fronton Accused of Doing the Minimum,” *Gainesville Sun*, February 14, 2012 <http://www.gainesville.com/article/20120214/articles/120219759>.

the fastest time.¹⁴⁶ It is much less expensive to build a barrel-racing track, and the costs of operating it are also much less expensive. At issue is whether it falls within the definition of a horse race. Critics call it a phony horse race. We discuss this issue in more Chapter II(B)(7)(f).

c. Decline of Purses, Handle

Purses are awarded to dog and horse racing owners who win races. They have declined slightly in recent years but the decline would have been much greater if it were not for revenue from slot machine and cardroom operations. The recent return of traditional quarter-horse racing in November 2009 at Hialeah Park also boosted overall purse numbers.¹⁴⁷

Total Florida pari-mutuel handle fell from \$1.8 billion in FY 1990 to \$876 million in FY 2012, a decline of 51 percent; live handle (the amount wagered by patrons at a host track where live racing was held) fell from \$1.8 billion to \$190 million, a decline of 95 percent; performances fell from 6,931 to 4,904, a decline of 41 percent and paid attendance fell from 15.3 million to 381,000, a decline of 83 percent.¹⁴⁸

Simulcasting first came to Florida on August 17, 1990, when Daytona Beach Kennel Club transmitted races to the Sports Palace in Melbourne. Prior to then, Florida handle came exclusively from live handle.¹⁴⁹

Simulcast wagering in Florida involves patrons visiting a pari-mutuel facility and wagering on live races conducted at other racetracks in Florida or at out-of-state tracks. In other words, the racetrack signal is being sent or imported to a Florida track to let its patrons bet on races/games at other facilities.

PMW categorizes intertrack handle as handle generated as a result of a Florida track/fronton exporting its signal to other Florida tracks or frontons, which enables patrons at those other Florida facilities receiving the signal to bet on those Florida races or games. Gulfstream, for example, would send its signal to the Palm Beach Kennel Club and patrons at the Palm Beach Kennel Club could then bet on those Gulfstream races. Intertrack involves only Florida-to-Florida facilities.¹⁵⁰

There is another simulcast category that PMW calls “Intertrack Simulcast.” It involves the rebroadcasting of simulcast signals received by a Florida track/fronton, which then sends that signal to other Florida tracks/frontons. Gulfstream, for example, would receive a signal from

¹⁴⁶ State of Florida Administrative Hearings, Case No. 11-5796RU.

¹⁴⁷ Florida PMW, review of Annual Reports.

¹⁴⁸ Ibid.

¹⁴⁹ Florida PMW, *Annual Report*, FY 1991, p. 3.

¹⁵⁰ PMW Annual Report, FY 2012, p. 2

Yonkers Raceway in New York, and then rebroadcast that signal to other Florida pari-mutuel facilities. Again, it involves only Florida-to-Florida facilities.¹⁵¹

The largest single category of simulcasting involves the export of signals from Florida pari-mutuels to out-of-state facilities. Gulfstream, for example, would send its signal to Yonkers. No information is available from PMW for this category, which is often called out-of-state generated simulcast revenue. The reason is because PMW does not track it. We note that other racing jurisdictions, such as New Jersey, do so. Without these data, it is not possible to offer a complete picture of simulcasting in Florida.

With the advent of simulcasting, live handle in Florida has accounted for less and less of total handle. By FY 2000, it accounted for 37.4 percent of total handle. Three years later, the figure fell to 29.7 percent, and for FY 2012 it was down to 24.3 percent.¹⁵²

d. Impact of Advance Deposit Wagering ('ADW')

Advance Deposit Wagering allows patrons to wager on racing (greyhound and horses) electronically. Patrons establish an account with an ADW company, and deposit money into the account prior to making any wagers. They can then place wagers from a computer, a home telephone or even a mobile phone.

ADW companies have flourished in recent years primarily due to convenience. A gambler never has to leave his or her house to make a bet, and can do so from just about anywhere. In addition, the low overhead associated with ADWs enables these companies to offer rebates to customers based on their betting volume. Since the ADWs command so much betting volume, they are able to negotiate take-out rates with host tracks that are quite favorable. The amount wagered through an ADW is funneled into the wagering pool of a host track, but Kent Stirling, executive director of the Florida Horsemen's Benevolent and Protective Association, said the track and horsemen are often forced to split between 6 cents and 9 cents of every dollar wagered through an ADW as opposed to 20 cents if the bet were made at a Florida racetrack on a live race.¹⁵³

Those ADW rebates can be as much as 12 percent of what a gambler wagers. Rob Wyre, general manager of the Isle of Capri at Pompano Park, told Spectrum racetracks cannot compete with the ADW rebates. "What's really frustrating is we see people come to the track and place their bets through ADW," he added.

¹⁵¹ Ibid.

¹⁵² Ibid.

¹⁵³ Interview with Kent Stirling, executive director of the Florida Horsemen's Benevolent and Protective Association, May 17, 2013.

The problem is exacerbated at the thoroughbred tracks in South Florida, as both Calder and Gulfstream are owned by companies that operate ADWs. According to Stirling, the television sets at Calder urge patrons to place their bets through an ADW.

Most of the ADW firms have established themselves in Oregon through a hub network. At a time when handle across the country and especially in Florida has been decimated, the ADWs have flourished. Greyhound racing lobbyist Jack Cory said that the greyhounds are hurt much more by the Oregon hubs than horse racing. He noted that at least with horse racing, some of that Oregon-hub money is split with the horsemen. The dog owners get nothing, he said. And, like the thoroughbreds, some greyhound racetracks operate their own ADWs. These greyhound facilities encourage their patrons to place bets on live races through their ADWs, depriving the dog owners of revenues if the bet had been made at the track.

Cory argues the handle is better than that painted by PMW annual reports as those reports fail to capture the Oregon-hub betting and the out-of-state generated handle, which is sizable.

The Oregon hub opened for business in 2000. Its total handle that year was just under \$2 million. In 2012, it had mushroomed to \$2.24 billion. From 2007 to 2012, handle increased 47 percent. During the same time period, total pari-mutuel handle in Florida fell 41 percent and simulcasting handle (where patrons came to a Florida track and wagered on races held at other Florida tracks) fell by 59 percent.¹⁵⁴ Other Florida handle sectors sustained significant declines as well. Live handle at Florida pari-mutuels fell 46 percent from 2007 to 2012.

Kentucky, another major racing state, is looking to tax the ADW companies on bets made in that state. A bill that passed a House subcommittee in February places a tax of 0.5 percent on Internet and telephone wagers made by Kentucky residents. The state will get 15 percent of the revenue, and racetracks and purse accounts would get the remaining 85 percent. Kentucky expects the tax to generate as much as \$400,000 a year.¹⁵⁵

Florida pari-mutuels have also been adversely impacted by wagering through offshore outlets or tribal hubs that are not captured by regulatory agencies at all. With the Oregon hubs, there is some revenue going back to the host thoroughbred and harness track and also to the state. But with the offshore hubs, the pari-mutuels and the state receive nothing. ACRI says there is good evidence that such handle amounted to more than \$1 billion in recent seasons.¹⁵⁶

¹⁵⁴ Oregon Racing Commission, http://www.oregon.gov/Racing/docs/Hub_Data/2013_quarterly_hub_handle_report.pdf (accessed May 17, 2013) and review of Florida PMW Annual Reports.

¹⁵⁵ Tom Lamarra, "Kentucky ADW Bill Clears House Committee," Bloodhorse.com, February 14, 2013, <http://www.bloodhorse.com/horse-racing/articles/76198/kentucky-adw-tax-clears-house-committee>.

¹⁵⁶ Association of Racing Commissioners International, *Pari-Mutuel Racing 2010*, p.1.

e. Impact of Slot Machine Casinos, Cardrooms on Purses

Florida voters approved a statewide slots referendum in November 2004 that made it possible for slot machine casinos to come to Broward and Miami-Dade counties. Voters in Broward County then approved a slots referendum in 2005 and Miami-Dade voters approved one in 2008.

As with handle, the source of Florida purse revenue has dramatically changed over the years. Before cardrooms and casinos, purses were funded exclusively through handle, and before simulcasting, all purses were funded through live handle.

Purses have received a significant boost with the introduction of cardrooms and slot machine casinos. At jai alai and greyhound facilities, 4 percent of cardroom gross receipts must be used to fund purses; the figure is 50 percent at horse race facilities. Unlike other racino states, Florida statutes do not mandate that a certain percentage of gross gaming revenue or a dollar amount from slot machines be used to fund purses and for breeding purposes. About the closest Florida comes is a requirement that a thoroughbred or quarter horse operator have a contract with horsemen before a casino can open. The horsemen at Pompano and greyhound owners say they need a similar-type law. Without one, they say the boost that casino revenue was supposed to generate for purses for greyhounds and harness will never be realized.¹⁵⁷

Spectrum's analysis shows that the percentage of GGR going into purses is much higher at thoroughbred than it is at harness and greyhound tracks. The two racino thoroughbred racetracks, Gulfstream and Calder, paid 14 percent and 12 percent, respectively, in FY 2012. The thoroughbred horsemen benefitted when the state's tax on GGR was lowered in FY 2010 from 50 percent to 35 percent, as the contract with the horsemen called for an increase if the tax rate was lowered. The GGR contribution nearly doubled. There was no such increase in GGR contribution at greyhound and harness racinos.¹⁵⁸ The two greyhound tracks and the one harness track put roughly 2 percent of GGR into purses in FY 2012.¹⁵⁹

Florida slot revenue accounts for much less on a percentage basis of total purse revenue than it does in other racino states. In Pennsylvania, for example, casino GGR accounted for anywhere from 75 percent to 91 percent of purses.¹⁶⁰ In Florida, our review of the FY 2012 PMW annual report showed that the figure ranged from 22 percent to 48 percent. In Iowa, the

¹⁵⁷ Interviews May 5, 2013, with Joseph Pennachio, president of the Standardbred Breeders and Owners Association, and Jack Cory, lobbyist for greyhound owners.

¹⁵⁸ Florida PMW, *Annual Report, FY 2012*.

¹⁵⁹ *Ibid.*

¹⁶⁰ Pennsylvania Gaming Control Board, custom report, May 8, 2013.

percentage figure of GGR for greyhound racing at Bluffs Run in Council Bluffs was 4.9 percent (\$10 million) in FY 2012 and 6.2 percent (\$3.7 million) at Dubuque Park.¹⁶¹

FY 2006 was the last year in which Mardi Gras and Isle Pompano operated without a casino. Comparing FY 2012 with FY 2006, purses increased by 33 percent at Mardi Gras and decreased by one-half of 1 percent at Isle Pompano. The Flagler dog track significantly increased its purses after its casino opened. The year before, Flagler paid purses of \$1.7 million; in FY 2012, it paid \$3.6 million in purses, an increase of 119 percent.¹⁶²

The percentage increases at racetracks in Pennsylvania ranged from 126 percent to more than 200 percent when we compared the increase from the year before a casino opened to the FY 2012 numbers.¹⁶³

Nonetheless, purse enhancements from Florida slot machines in FY 2012 totaled more than \$20 million. Overall purses increased slightly, from \$126.7 million in FY 2006 to \$129.5 million in FY 2012, an increase of 2.2 percent. The return of quarter horse racing generated \$4.1 million in purses during FY 2012.¹⁶⁴

f. Pari-Mutuels by Sector

Next, we discuss the pari-mutuel industry by sector. Two sets of reports were used for this analysis. One involved 2012 audited financial statements for each pari-mutuel license holder. They included detailed breakdowns of expenses and revenues. They are not normally available to the public. PMW agreed to make them available to us. Pari-mutuel operators are required to supply those audited financial reports on a yearly basis. We also reviewed annual reports from 1990 to 2012 that appear on the PMW website. These reports provide details as to purses paid, paid attendance, total handle and other items as well. The two reports cover different fiscal periods, and, as a result, the numbers sometimes do not match up.

Please note that Chapter III(A)(1) provides yearly performance and other key performance indicators for each sector.

Thoroughbred Racing

Thoroughbred racing is the dominant pari-mutuel sector in Florida, with the three tracks accounting for 61 percent of total Florida handle in FY 2012. Calder had the highest FY 2012 handle at \$207 million. Overall handle fell from \$789.2 million in FY 1990 to \$530.7 million in

¹⁶¹ Interview May 13, 2013 Joseph Quilty, Iowa Greyhound Association, Spectrum review of Pennsylvania Racing Commission Racing Reports.

¹⁶² Florida PMW, review of *Annual Reports*.

¹⁶³ Florida PMW, *Annual Report FY 2012 and Pennsylvania Gaming Control Board custom report*.

¹⁶⁴ Florida PMW, *Annual Report FY 2012*.

FY 2012, a decline of 33 percent while live handle fell even more, from \$170.5 million to \$78.6 million, a decline of 54 percent.¹⁶⁵

On a national level, handle losses were also significant. From CY 2001 to CY 2010, (CY 2010 was the most recent year data were available), total handle fell from \$10 billion to \$5.4 billion, a decline of 46 percent and live handle fell from \$1.8 billion to \$1 billion, a decline of 44 percent.¹⁶⁶

A Florida thoroughbred operator must run a minimum of 40 performances a year.¹⁶⁷ From FY 1990 to FY 2012, Florida thoroughbred performances fell from 348 to 327, a decline of 6 percent; paid attendance fell from 653,206 to 97,738, a decline of 85 percent. Purses increased from \$78.1 million to \$81.1 million, a rise of 16 percent.¹⁶⁸

The three thoroughbred tracks performed financially as a group much better than other sectors. They generated a combined operating profit of \$13 million for FY 2012. Much of the profit, \$10.6 million, came from pari-mutuel operations. Slot machines at Calder and at Gulfstream generated an operating profit of \$2.7 million. Cardrooms at the thoroughbred tracks had a gross operating profit of \$2.3 million.¹⁶⁹

Even Tampa Bay Downs, the one thoroughbred track in the state without a casino, generated operating income of nearly \$3 million. It currently ranks 12th out of 68 thoroughbred tracks in average daily handle although the figure has been declining in recent years. While its handle has held up well, its purses have not. It ranks 34th of 68 in average daily purses paid.¹⁷⁰ The Tampa Bay track is the only thoroughbred track in the country that competes with same-state racinos.

Average purses per race at Tampa Bay Downs in 2011-12 were \$15,769 – 42 percent below the combined Calder-Gulfstream average and 37 below the national average.¹⁷¹ While Tampa Bay continues to be a top-tier thoroughbred track, officials are concerned how much longer that may be with purses declining.¹⁷² As General Manager Peter Berube put it, “Florida sunshine can go just so far.”

¹⁶⁵ Florida PMW, review of *Annual Reports*.

¹⁶⁶ Spectrum analysis of Association of Racing Commissioners International, *Pari-Mutuel Racing report 2010*.

¹⁶⁷ Section 550.002 (11), Fla. Stat.

¹⁶⁸ Florida PMW, review of *Annual Reports*.

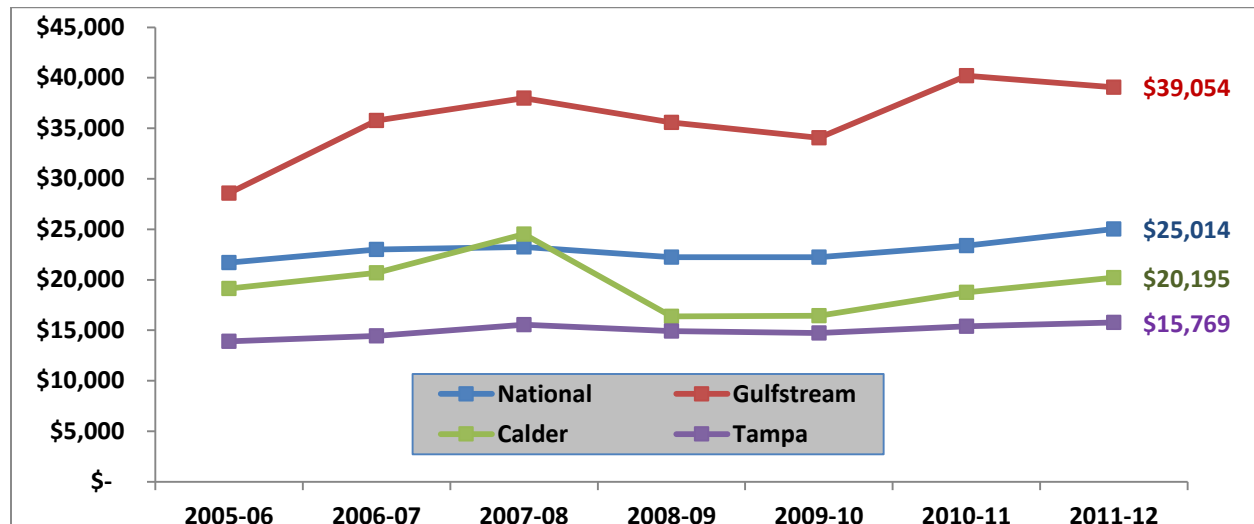
¹⁶⁹ Florida PMW, *Independent Auditor’s Report for Pari-Mutuel Permitholders, FY 2012*.

¹⁷⁰ *Ibid*.

¹⁷¹ Data from, and interviews with, with Peter Berube, Tampa Bay Downs general manager, June 2013.

¹⁷² *Ibid*.

Figure 23: Average purse per race, Florida and national thoroughbred tracks, 2011-12



Source: Tampa Bay Downs

What has hurt Tampa Bay Downs is that it is unable to supplement its purses with casino revenue as other thoroughbred tracks in Florida and throughout the country have done. The competition is fierce for quality horses as the nationwide breeding program has collapsed, resulting in 23 percent fewer race-ready horses being available to compete. Tampa Bay Downs has seen its field size shrink by 12 percent in the past three years. Horse owners are taking their horses to tracks that offer higher purses, and that invariably means tracks that supplement their purses with casino revenue. “We are under siege,” Berube said.¹⁷³

Horsemen at thoroughbred racinos have much more leverage with regard to labor contracts than do other pari-mutuel sectors due to the law that says a contract must be negotiated with horsemen before a casino can open. Mike Couch, director of gaming at Gulfstream, said in an interview with Spectrum on May 16 that the law is unfair and results in Gulfstream paying out much more in GGR toward purses than the other sectors pay.

More than \$6.2 million, or 88 percent of Gulfstream’s operating profit, came from pari-mutuel operations.¹⁷⁴ No other pari-mutuel facility in the state comes close to that figure. In fact, most pari-mutuel facilities lose money on their pari-mutuel operations, and need cardroom and/or casino revenue to subsidize those losses. Couch said the reason Gulfstream is successful with its pari-mutuel operation is because it considers itself first to be a racetrack and then a casino.

The thoroughbred horsemen say that Gulfstream is a pari-mutuel success story that other pari-mutuel entities would do well to emulate. Gulfstream Park completed the 2013 winter race meet with a 20 percent increase in on-track wagering over the 2011-2012 race meet. Purses paid

¹⁷³ Ibid

¹⁷⁴ Ibid.

during the 2013 Gulfstream Park meet averaged more than \$411,000 daily. And \$658,000,000 was wagered on the Gulfstream Park signal outside of the state of Florida, or an average of over \$733,000 per race. California's Santa Anita, at \$622,000, was the next-highest in the country followed by New York's Aqueduct at \$508,000.¹⁷⁵

Harness Racing

Florida's sole harness track, Isle Casino and Racing at Pompano, accounted for 5 percent of total Florida handle in FY 2012. The Pompano track must run at least 140 performances a year but it can seek a one-time, 10 percent reduction from the 140-performance minimum. The harness track stopped charging an admission fee in 2002. In 2001, the last year it levied an admission fee, paid attendance was 9,908. In 1990, it was 565,216.¹⁷⁶

Harness handle fell from \$112.1 million in FY 1990 to \$48.1 million in FY 2012, a decline of 57 percent while live handle fell from \$14.1 million to \$4.4 million, a decline of 69 percent. On a national level, total harness handle from CY 2001 to CY 2010 fell from \$866 million to \$453 million, a decline of 48 percent and live handle fell from \$452 million to \$162 million, a decline of 64 percent. (CY 2010 was the most recent year available.)¹⁷⁷

The harness track is not required to have a contract with horsemen as thoroughbred tracks are required to do before a casino can open. The percentage of GGR to purses is much less than it is at thoroughbred tracks. In FY 2012, \$2.6 million of \$121 million in GGR went toward purses at Pompano. Gulfstream with a GGR of \$54.5 million put \$7.5 million of GGR into purses.¹⁷⁸

Joe Pennachio, president of the Florida Standardbred Breeders & Owners Association, told us in an interview on May 20, 2013, that track owners promised that 8 percent of GGR would go into purses when his group and others worked to support the 2004 statewide referendum that resulted in Pompano getting its casino. "It obviously never happened," he said. "We feel we were hoodwinked. And even worse, the track operator has done everything possible to discourage people from coming to the track. What's important to remember here is that if it were not for the pari-mutuel facilities, casinos would not be here."

Purses have actually declined slightly, one-half of 1 percent, from FY 2006 (the last full fiscal year that Pompano did not have a casino) to FY 2012.

¹⁷⁵ Florida Horsemen's Benevolent and Protective Association, custom report, May 22, 2013.

¹⁷⁶ Florida PMW, review of *Annual Reports*.

¹⁷⁷ Association of Racing Commissioners International, *Pari-Mutuel Racing 2010 and 2000*.

¹⁷⁸ Florida PMW, review of *Annual Reports*.

We toured the Pompano facility on May 20, 2013. Only the ground floor of the racetrack was open. The facility is in a state of disrepair. According to Pennachio, management will close the grandstand area later this summer, which will force patrons to watch live races from a row of seats set up outside the casino. That places spectators by the turn as horses approach the finish line, making it difficult from that angle for them to see who wins.

Michael Tanner, executive director of the United States Trotting Association, said closing the grandstand will adversely affect live handle and give little incentive to patrons to go to the track to watch live racing. “Pompano could become the only track in the world where you watch the race 1/16 of a mile from the finish line,” Tanner said.

Pompano General Manager Rob Wyre said all options are being considered. He noted that the track was built in 1963, and it is too expensive to rehabilitate. In addition, there are safety issues relating to some of the windows on the upper floors, he noted.

The purse figures for Pompano that appear on the PMW website are inaccurate. Pennachio disputed the purse numbers that appear in the PMW annual reports. We relayed his concerns to PMW. We received an email from Leon M. Biegalski, Director of PMW, on May 16, 2013, in which the director acknowledged that the PMW purse amounts were overstated by several million dollars. PMW will be amending its annual report as it relates to Pompano for FY 2009-2012. Biegalski said in his email that PMW relies on figures provided to it by pari-mutuel operators. We have made the adjustments to the data, and our analysis reflects the adjusted numbers.

Quarter Horse Racing

Quarter horse racing involves American Quarter Horses that run a quarter-mile at speeds as high as 55 miles per hour. Quarter horse racing returned to Florida in November 2009 at Hialeah Park after an 18-year absence. Quarter horse racing accounted for less than 1 percent of total Florida handle in FY 2012. Quarter horse racing had 76 performances in FY 2012. It generated a live handle of \$1.7 million, total handle of \$2.1 million and purses of \$3.8 million. Almost all of the traditional quarter horse activity was at Hialeah, where the operator subsidized purses as part of its contract with horsemen.

Hialeah has already begun negotiations with the state to offer live thoroughbred racing, in addition to the quarter horse racing.¹⁷⁹ Obtaining the quarter horse permit made it possible for Hialeah to open a casino (scheduled for summer 2013) but Hialeah representatives say they want to do far more than just build a casino. Hialeah owner John Brunetti acknowledged that he is not “a fan of slot machine casinos” but noted that it afforded him an opportunity to bring back racing to Hialeah.¹⁸⁰

¹⁷⁹ Interview with Hialeah owner John Brunetti and other Hialeah representatives, June 4, 2013.

¹⁸⁰ Ibid.

Eventually, Hialeah Park expects to convert the 200-acre property into a destination resort that will feature a \$112.5 million casino hotel, a \$75 million casino hotel, a \$119 million entertainment and convention complex, a \$210 million town center and retail district and a \$61.3 million parking garage. The total cost of the project is estimated to be \$842.9 million. Brunetti noted that racing will be integrated into the complex so that it will never become an afterthought, which he believes is the case at too many Florida pari-mutuel facilities.¹⁸¹

Steve Fisch, president of the Florida Quarter Horse Owners Association, said that Hialeah purses will total \$140,000 a day or \$5.6 million in FY 2013, 47 percent higher than it was in FY 2012, when Hialeah operated without a casino. Hialeah owner Brunetti explained in an interview with Spectrum on June 5, 2013, that live handle was so low the first three years that he had to pay almost the entire amount of purses himself from FY 2009 thru FY 2012. In FY 2012, Hialeah paid out purses of \$3.8 million. During the three-year period ending June 30, 2012, Brunetti said he lost nearly \$30 million as he had no cardroom or slot machine revenue to help him offset the loss.

Florida state law allows quarter horse racing to be imported only into Florida simulcast parlors while there is live racing at Hialeah. That is not an issue for the thoroughbreds since they race year-round. But it is a problem for the new quarter horse industry as the live meet is only 40 days. The lack of year-round simulcasting of quarter horses in Florida makes it difficult to attract new customers.¹⁸²

Barrel Racing

Another major issue for the quarter horse industry is PMW's racing permit granted to Gretna in Gadsden County for barrel racing. Fisch said the permit jeopardizes the future of legitimate quarter horse racing in Florida.

Barrel racing is conducted on an obstacle-type course that is often performed at rodeo and horse shows. Each horse is timed as it races around three barrels in separate, cloverleaf-type courses. The winner is the horse with the fastest time. No other racing jurisdiction has ever sanctioned such a pari-mutuel event. Gretna held its first race on December 1, 2011. Fisch's organization sued, arguing that the PMW decision made a mockery out of the state's pari-mutuel laws. An administrative law judge ruled on May 6, 2013, that PMW had no authority to issue a permit for barrel racing and that it had improperly created "a new species of horseracing."¹⁸³

With the permit, Gretna was able to establish a cardroom. And Gadsden County voters have approved a referendum that would allow it to have a casino. The state Constitution will

¹⁸¹ Ibid.

¹⁸² Interview Steve Fisch, President, Florida Quarter Horse Owners Association.

¹⁸³ State of Florida Administrative Hearings, Case No. 11-5796RU, Administrative Law Judge John Laningham, p. 55.

have to be amended for that to happen, according to the Attorney General, as currently state law only permits racinos in Broward and Miami-Dade counties.

The Daily Racing Form reported that barrel racing represents an effort by permit holders to exploit the gambling opportunities in Florida presented by “a convoluted set of laws and regulations” in Florida.¹⁸⁴ Wesley Cox, a spokesman for the North Florida Horsemen’s Association that represents the barrel riders, told us in an interview on May 14, 2013, that the administrative law judge decision will be appealed. He said the law is vague in its definition of a race. He acknowledged that the Gretna operator could not financially afford to build a traditional quarter horse race track so he turned to barrel racing.

Marc Dunbar, an attorney for Gretna, said his client would have had to have spent \$10 million to build a traditional 5/8 mile quarter horse track because of wetlands problems. It was prepared to build a \$3.5 million facility but the Florida Quarter Horse Racing Association refused to endorse the project so it then embraced barrel racing. “We believe that we will ultimately prevail,” Dunbar said.

Fisch notes that barrel racing requires substantially fewer horses and personnel than traditional quarter horse racing as conducted at Hialeah Park. The cost of erecting a barrel race course is minimal when compared with the several million dollars that would have to be invested to build a quarter horse track, he noted. Gretna offered purses of \$202,000 in FY 2012; Hialeah offered purses of \$3.8 million. Gretna had a live handle of \$31,000; Hialeah, \$1.6 million.¹⁸⁵ Another track, Hamilton Downs, has also received a license to operate barrel racing.

Greyhound Racing

Greyhound racing accounted for 30 percent of total handle in FY 2012. Total handle for the 13 facilities that ran greyhound racing fell from \$933.8 million in FY 1990 to \$265.4 million in FY 2012, a decline of 67 percent. Palm Beach Kennel Club had the highest handle at \$36.3 million; Melbourne Greyhound Park, the lowest at \$162,000. Live handle (live handle and total handle were the same in 1990) fell even more, from \$933.8 million to \$93 million, a decline of 90 percent. Purses fell from \$34.5 million to \$26.3 million, a decrease of 18 percent.¹⁸⁶

On a national level, from FY 2001 to FY 2010 (the most recent year for which data were available), total handle fell from \$2 billion to \$706 million, a decline of 65 percent and live handle fell from \$829 million to \$203 million, a decline of 76 percent. Performances fell from

¹⁸⁴Matt Hegarty, “Ocala Breeders' Sales Company plans Quarter Horse race Dec. 11,” *The Daily Racing Form*, October 25, 2012 <http://www.drf.com/news/ocala-breeders-sales-company-plans-quarter-horse-race-dec-11>.

¹⁸⁵ Florida Quarter Horse Association, custom report, May 24, 2013.

¹⁸⁶ Florida PMW, *Review of Annual Reports, FY 1990-2012*.

4,242 to 3,336, a decline of 21 percent; paid attendance fell from 653,206 to 97,738, a decline of 85 percent.¹⁸⁷

Florida greyhound performances (a racing card of at least eight races) fell from 3,853 to 3,636, a decline of 6 percent. One of the reasons for the relatively small decline is because of the 90 percent rule. Pari-mutuel operators with cardrooms are required to conduct at least 90 percent of the live performances that were held the year before their cardrooms opened, which for many of them was 1996.¹⁸⁸

The Naples-Fort Myers greyhound track had to run 393 performances in FY 2012 to keep its cardroom license. Often, performances are run twice a day during the 190-day meet to comply with state law.¹⁸⁹ Track spokesman Isadore Havenick told us in an interview that his company does not want to eliminate racing but needs some relief from what he calls the “onerous” 90 percent rule. He noted that the situation was quite different in 1996 when greyhound racing was much more popular than it is today. Running so many races and performances results in the track sustaining a loss of more than \$2 million a year on its dog operations, he said, and forces it to offer lower purses, which adversely affects the amount of money wagered on simulcasting and the quality of dogs that race. Havenick said there is still a demand for greyhound racing in the Fort Myers-Naples region but not as “much as we are running.”

Repealing the 90 percent rule, or “decoupling,” could result in the closure of five to six greyhound tracks, according to operators we interviewed. Those facilities would still like to operate cardrooms, as they are profitable, but they cannot as current law states that a cardroom can only be operated at a licensed pari-mutuel facility that offers live racing. Top-tier tracks such as Naples-Fort Myers and the Palm Beach Kennel Club will benefit through higher simulcast revenue if other tracks were to close.

It is clear that pari-mutuel operations at greyhound tracks are loss leaders as the tracks sustained a combined operating loss from wagering on greyhounds of \$35 million. Only three tracks made a profit. Greyhound track cardrooms offset the loss with an operating profit of \$39 million.¹⁹⁰

“It is a dying sport,” said Michael Glenn, general manager of the Palm Beach Kennel Club, one of the country’s premiere greyhound tracks. “Decoupling (removing the requirement for minimum performances) will help us in the short run as we would run fewer races which, in turn, will lower our operating costs. Our simulcast revenue will also increase, but there just are not enough folks out there to come to the track and wager on these races. There is not any interest.” PBKC would shut down the dog track if it could, Glenn said.

¹⁸⁷ Association of Racing Commissioners International, Statistical Summaries, 2001-2010.

¹⁸⁸ Section 849.086 (5 b), Fla. Stat.

¹⁸⁹ Florida PMW, *Annual Report FY 2012*.

¹⁹⁰ Florida PMW, *Independent Auditor’s Report for Pari-Mutuel Permitholders, FY 2012*.

Jamie Shelton, CFO of Jacksonville Greyhound Racing, agrees with Glenn. He said that no matter what efforts are made to prop up the sport, interest is not there. “We can see it by our live handle. The older folks are not being replaced,” he said. “There are just too many other things to do out there today. Watching a greyhound race is not at the top of most people’s agenda.”

Jacksonville has consolidated its operations. It has three greyhound permits, and runs all of them out of Orange Park. It shuttered its Jacksonville facility in March 2012, and, as the result of a declaratory statement from PMW, it was able to move its cardroom to a Jacksonville shopping center.¹⁹¹ The track operator requested a ruling from PMW before it built its new facility in Jacksonville. In effect, PMW sanctioned a form of decoupling, allowing a pari-mutuel facility to open without having to operate a track oval and offer live racing. PMW based its decision on the fact that section 550.475, Florida Statutes, “makes no reference to the existence of an actual track at the permitted location.” The Jacksonville permit was leased to Orange Park.

With the three permits, Orange Park operates year-round: 340 days and 417 performances in FY 2012. Shelton said the facility just about breaks even but he noted that it is just a matter of time before the losses on racing will become so large that Orange Park will have to close. Even slot machines would not help, as they would not compel people to bet on the dog races, he noted. Slot machines would prop up the business for a while but eventually the sport will die, he said.

Jack Cory, a lobbyist for greyhound owners, said the sport would not be dying if track operators would reinvest in their properties. He noted that some of them have let them deteriorate to the point where going to those tracks is unpleasant. He noted that the intent of the 90 percent rule was to preserve live racing by making sure that live racing had to be offered in exchange for the right to operate a cardroom or casino. “Let’s go back to the voters and see if they want to cut back on live racing,” Cory said in an interview with Spectrum on May 29, 2013. “We might even agree to reduce the numbers but there is no way we would agree to no live racing at all.”

As we have noted throughout this report, operators are looking for ways to reduce the costs of operating pari-mutuel events. Melbourne Greyhound track proposed running two-dog races with a two-kennel roster under the same ownership for its 2013 meet. The American Greyhound Association called the proposal “an affront to the greyhound owners and kennel operators in America who’ve raised, trained and invested in the development of greyhounds with the intent of competing in full fields (most preferably, eight entries per race), and to those fans who enjoy watching and wagering on such races.”¹⁹² In light of the opposition, Melbourne withdrew its petition for two-dog races.

¹⁹¹ Petition for Declaratory Statement, Jacksonville Kennel Club, DS-2008-38, November 21, 2008.

¹⁹² National Greyhound Association, “Two-dog race plan condemned,” February 13, 2013. <http://ngagreyhounds.com/issue/january-february-2013/article/two-dog-race-plan-condemned>.

Grey2K USA, an organization calling for the end of dog racing on humane grounds, frames the issue this way: Should the state “force a business to conduct one activity so that it may offer another?”¹⁹³ According to Grey2K, nearly two-thirds of the 1,199 licensed greyhound owners live out of state. As for humane issues, the organization claims that 8,000 greyhounds are kept in kennel compounds in rows of small stacked cages. Dogs are kept in cages 20 to 23 hours a day. Nine cases of severe neglect have been documented at Florida dog tracks and kennels since 2004.¹⁹⁴ As of May 21, 2013, Florida greyhound tracks must report to the state the death of any racing greyhound that occurred at a track or kennel.¹⁹⁵

Jai Alai

The object of jai alai is to hurl the ball (pelota) against the front wall with the goal being that an opponent will be unable to return it. The game can involve doubles or singles. Games are 7 to 9 points. It used to be that as many as eight different teams would play. A losing team would go to the end of the bench.¹⁹⁶ Florida is the only state that continues to offer jai alai, which accounted for 3 percent of the state’s total pari-mutuel handle in FY 2012.

Of all the pari-mutuel sectors, jai alai has sustained the steepest cuts in attendance and popularity. Since 1990, total handle has fallen 91 percent, live handle 96 percent, player awards 63 percent and performances, 63 percent. In 1990, 3.9 million people paid to watch the sport. In 2012, total paid attendance was 9,068.¹⁹⁷

The six jai alai operators suffered an operating loss for FY 2012 of \$25.6 million; \$21.6 million came from Ft. Pierce-Miami Jai Alai, whose auditor expressed concern whether the frontons could continue to stay in business. The slots at Miami Jai Alai may improve its fiscal situation.¹⁹⁸ From pari-mutuel operations, the jai alai sector sustained an operating loss of \$14 million. Cardrooms were able to generate an operating profit of \$1 million. Miami Jai Alai had the highest handle at \$6.6 million in FY 2012; Hamilton Jai Alai, the lowest at \$2.00.¹⁹⁹

¹⁹³ Grey2KUSA, “Decouple Live Greyhound Racing,” <http://www.grey2kusa.org/pdf/DecoupleLiveGreyhoundRacingFL.pdf> (accessed May 23, 2013).

¹⁹⁴ Grey2K Florida Senate testimony, February 4, 2013 http://www.flsenate.gov/PublishedContent/Committees/2012-2014/GM/MeetingRecords/MeetingPacket_1997.pdf.

¹⁹⁵ Rule 61D-2.023, Fla. Admin. Code.

¹⁹⁶ Hamilton Jai Alai and Poker website, <http://www.hamiltondownsjaijai.com/> (accessed May 17, 2013).

¹⁹⁷ Florida PMW, *Annual Reports*, FY 1990-FY 2012.

¹⁹⁸ Florida PMW, *Independent Auditor’s Report for Pari-Mutuel Permitholders*, FY 2012.

¹⁹⁹ Florida PMW, *Annual Reports FY 2012*.

The Miami fronton opened in 1926. Through the 1980s, business was brisk. The fronton was renovated and seating expanded from 7,000 to well over 13,000. But things changed as new forms of gambling became legal in 1960s and 1970s.²⁰⁰

Like other pari-mutuel sectors, jai alai is required to offer a minimum number of performances to keep its cardroom open. And the number depends on when the cardroom opened. As noted in other pari-mutuel sectors, the 90 percent rule requires that live performances be equal to at least 90 percent of what was conducted the year before the cardroom opened. Performances in FY 2012 ranged from a high of 214 at Dania to 24 at Hamilton. A performance consists of eight games.

Last year, Ocala stretched the letter of the law when it hired two locals who played each other over and over to comply with the minimum-performance law. The operation drew protests from jai alai players in South Florida who picketed the fronton. They argued that having the same two players play was a gimmick to comply with the law. General Manager Brian Matthews told us in an interview on May 21 that he had no choice but to run jai alai the way he did because it loses so much money, adding, “We can’t get anyone to watch it.” According to the financial audited report submitted to the state for FY 2012, Ocala lost \$453,000 on jai alai. Part of that included a \$22,000 tax because Matthews elected to run only 41 performances instead of the 100 required by the state. “It was cheaper for me to pay the tax than it was to stay open,” he noted. “If this was just jai alai, we would have been closed long ago.

Glenn Richards operates Hamilton Jai Alai and Poker. He operates pretty much the same way as Ocala, and acknowledged to us in an interview on May 8, 2013, that he is not happy about it. “People call it a joke, and I cannot disagree,” he said. “It is either do this or shut the door. We cannot get anyone to watch this anymore.” Hardly anyone is betting on it any more either. The total handle in FY 2012: two dollars.²⁰¹

Richards relies on a four-person jai alai roster. One is a father and his son, who both at one time played professionally at South Florida frontons. Richards must hold 100 performances over a fiscal year to retain his cardroom license, which opened in 2004. He is hopeful he can stay open until next year when the law will allow him to reduce his performances to 40.

For now, his four players play several times a day over a one-week period from March to June to meet the 100-performance requirement.

g. Critical Issues to Address

The thoroughbred sector is clearly the healthiest of the sectors but it too has sustained steep declines in live handle. What’s keeping many of the other pari-mutuel facilities open is

²⁰⁰ Michael Mooney, “Echoes of a Dying Game,” SB Nation, February 28, 2013
<http://www.sbnation.com/longform/2013/2/28/4036934/jai-alai-sport-in-america-miami>.

²⁰¹ Florida PMW, Annual Report, FY 2012,

cardroom and slot revenue but eventually, if the downward trend continues, it is likely that even those revenues will not be enough to keep some greyhound tracks and frontons open. Many operators acknowledged to us that the prospect of possibly operating slot machines was enough for them to continue to stay in business and sustain significant losses. In FY 2012, the pari-mutuel operations at the greyhound tracks sustained operating losses of \$35 million, jai alai, \$14 million and harness, \$2.4 million. Only the thoroughbred tracks were able to realize an operating profit, \$10.6 million, from their pari-mutuel operations.

One area that Spectrum's research indicates is in need of review is the law requiring a minimum number of performances. When the law was adopted in 1996, the intent was to assist pari-mutuels by providing a funding stream for purses. But operators say times have changed, and the current law prevents them from reacting to today's business climate. Many track operators across the country have reduced racing dates, which, in turn, lets them increase average purses and lower operating costs. In Florida, a number of operators are forced to run well over 300 performances a year.

At the same time, horsemen and dog owners stress that some operators have done all they can to destroy their pari-mutuel operations in an effort to convince the Legislature to adopt "decoupling," which would remove the requirement that a minimum number of performances be held.

Pennsylvania relies on a racing advocate to ensure that its racino operators do not ignore racing interests. Each year, the Pennsylvania Gaming Control Board compiles an annual benchmark report to measure the impact that slot machine revenues have had on the horse racing industry. Florida has no such review mechanism. Purses at the harness track, even with a casino, have actually declined, and horsemen say that casino operations overshadow the track. The track is considering shutting down the grandstand, which would make it the only track in the country where patrons watch the finish of a race one-sixteenth of a mile away from the finish line.

With respect to casinos, as we noted in this report, the thoroughbred and quarter horse sectors are treated differently when it comes to pari-mutuel requirements. This is true even within the horse racing sector itself. Thoroughbred and quarter horse operators, for example, must have a contract in place with horsemen before they can open a casino. There is no such requirement for harness or the other pari-mutuel sectors. Almost all racino states require that a certain amount of gross gaming revenue be set aside to enhance purses. There is no such requirement in Florida.

Another contentious issue that may come before the Legislature is how to define a race or a game. Jai alai and dog track operators have argued that the current law is vague enough that it allows them to run just two dogs in a race or have just two jai alai players play over and over.

There is the barrel-racing issue that has drawn national attention. An administrative law judge recently ruled that PMW had no right to issue a barrel-racing permit for quarter horse racing.²⁰²

8. Cardrooms

a. Nationally

Five states including Florida allow cardrooms that are not inside a casino. Typically, cardroom games are restricted to poker and poker variants, although Washington began allowing cardrooms in 1997 to offer blackjack.

It is difficult to compare cardroom performance in Florida with cardrooms in other states because Florida is the only state that restricts its cardrooms to pari-mutuel facilities that, for the most part, are racing-only operations. Other states such as Washington and California allow their cardrooms in standalone facilities. Montana does not provide any data. Minnesota has only one cardroom.²⁰³ Because of the differences from state-to-state in cardroom operations, the American Gaming Association stopped collecting revenue numbers for cardrooms effective with its 2009 annual *State of the States* report.

We tracked performance data for California, as its cardroom business model is the closest to Florida's. California had 119 cardrooms in FY 2002. In FY 2007, the number fell to 92.²⁰⁴ Despite the drop-off, its gross receipts increased from \$563 million to \$794 million, an increase of 46 percent. During the same time period, Florida's gross receipts increased from \$2.8 to \$54.2 million, a nearly 17-fold increase.

b. Florida

The first Florida cardrooms, which are restricted to poker and dominoes, opened on January 1, 1997. While dominoes is a permitted game, most facilities do not offer it. Palm Beach Kennel Club said it stopped offering it after months went by and no one played the game. By the end of the first fiscal year, nine cardrooms were operating.²⁰⁵ Gross receipts, or the amount received by the cardroom from players, totaled \$2.2 million that first year. At that time, the winnings of any player in a single round, hand or game could not exceed \$10. Players at a five-handed seven-card stud table would simply put in \$2 each and all betting and raising would cease. The dealer simply dealt the rest of the hand face up. A cardroom could only operate two hours prior to post time and up to two hours after the last pari-mutuel event. The state established

²⁰² State of Florida Administrative Hearings, Case No. 11-5796RU, Administrative Law Judge John Laningham.

²⁰³ 2008 *State of the States*, p. 35.

²⁰⁴ *State of the States*, 2004-2008.

²⁰⁵ Florida PMW, *Annual Report, FY 1998*, p. 3.

a 10 percent tax on gross receipts, a rate that continues to this day. Additionally, each operator must pay cardroom table fees annually in the amount of \$1,000 for each table to be operated.²⁰⁶

Poker in Florida began to increase in popularity in 2003, when the Legislature amended the law to enable the poker pot to exceed \$10, but players could still not bet more than \$2 with any given action. Up until then, poker gross receipts had not increased much at all but they soared from \$2.8 million in 2003 to \$18.5 million in FY 2004. With more venues added, the figure continued to rise by double-digit percentages through 2009 when it totaled \$102 million. In FY 2012, it reached \$131.5 million. The change that made Florida a major poker playing state was the removal of all betting limits as of July 1, 2010. Today, there are 24 cardrooms. In 2003, there were only 10. Other cardroom rule changes that increased the profitability of cardrooms included a provision that also took effect July 1, 2010, that increased their hours of operation to 18 hours during the week and 24 hours on weekends.²⁰⁷

The cardroom law was created to boost operations at pari-mutuel facilities. They had to be at a track or jai alai fronton. At jai alai and greyhound facilities, 4 percent of cardroom gross receipts are used to fund purses and player awards; the figure is 50 percent at horse race facilities.

But with opening of Bestbet in Jacksonville in February 2012, Florida had its first off-track betting parlor. PMW made it possible for that to happen when it issued a declaratory statement to allow pari-mutuel businesses to operate a separate cardroom and simulcast parlor if the license holder closed an existing facility and opened a poker room in the same county and within 30 miles of the old one.²⁰⁸ Jacksonville Greyhound Racing Inc. closed its Jacksonville track in 2009 but retained its license and transferred its racing dates to nearby Orange Park, which it also owns. Jacksonville was then able to transfer its cardroom license to the off-site location in Jacksonville, and establish the biggest cardroom in the state of Florida, without having to build a track oval. Geographical constraints make it difficult for other such license transfers to occur.²⁰⁹ But we note that Palm Beach Kennel Club acquired an inactive jai alai permit and then converted it into a greyhound permit. At issue is whether it can now operate a cardroom from a remote location as Jacksonville Racing has done.²¹⁰ The matter is currently before the courts.

²⁰⁶ Florida PMW, *Annual Report*, FY 2012.

²⁰⁷ Ibid.

²⁰⁸ Roger Bull, "Jacksonville Kennel Club to open poker room near Regency Square mall," *The Florida Times-Union*, June 28, 2011 <http://jacksonville.com/news/metro/2011-06-28/story/jacksonville-kennel-club-open-poker-room-near-regency-square-mall>.

²⁰⁹ Interview May 21 with Gene McGee, lobbyist for Jacksonville Racing Inc.

²¹⁰ Interview May 18 with PBKC officials.

Palm Beach Kennel Club had the highest cardroom receipts in FY 2012 at \$11.4 million; Hamilton Jai Alai and Poker the lowest at \$596,000.²¹¹ Palm Beach Kennel Club Manager Noah Carbone, in a May 16, 2013, interview said the rule changes have made Florida one of the top poker venues in the country. He said before the rule changes, professional players from Florida would travel to Atlantic City and Nevada to play poker. Now, they stay here, he said. Further, many tourists are also playing now that the table limits have been removed.

Carbone said he would like to see the state remove the requirement that cash cannot be placed on a poker table. The law currently requires that players use only chips. He believes that relaxing the cash rule will increase profits for the cardrooms. The cardrooms have become so profitable that they have enticed new pari-mutuel operations to open and have resulted in still others continuing to remain open even though their pari-mutuel activity generate substantial losses, as we have noted throughout this report.

For example, the greyhound sector cardrooms generated an operating profit in FY 2012 of \$38.8 million while their pari-mutuel activities had an operating loss of \$35 million. Daytona Beach Kennel Club had the highest cardroom operating profit of \$6.4 million. All but one of the greyhound tracks had cardroom operating profits.²¹² The racing sector cardrooms also generated an operating profit of \$2.6 million.²¹³

Some operators, such as Jamie Shelton, the CFO of Jacksonville Greyhound Racing, noted though that cardroom revenues have begun to level off across the state. In an interview with Spectrum on May 30, 2013, Shelton said that it is unrealistic to expect cardroom revenue to continue to subsidize pari-mutuel operations. At some point, he noted that there will come a point where the cardroom profits cannot cover the pari-mutuel losses. "It is just a matter of time," he said.

FY 2013 data show that cardroom revenue has begun to decline at many facilities. We compared the 10-month period ending April 30 with the previous year: Calder was off by 17 percent, Tampa Bay Downs, 14 percent and Pensacola Greyhound track, 10 percent. Thirteen of the 24 cardrooms associated with live racing sustained declines.²¹⁴ Should these downward trends continue, the ramifications for the pari-mutuel operations could be ominous.

9. Charitable Bingo

Florida's bingo statute authorizes the conduct, handling of proceeds and limitations of bingo games by charitable organizations. All charitable organizations must meet the state's

²¹¹ Ibid.

²¹² Florida PMW, *Independent Auditor's Report for Pari-Mutuel Permitholders, FY 2012*.

²¹³ Ibid.

²¹⁴ Review of PMW pari-mutuel wagering reports.

statutory requirements as well as be qualified as an exempt 501(c.) organization under the federal Internal Revenue Code.

Florida's bingo laws require that all proceeds from the conduct of the bingo games be donated to charitable organizations, less actual business expenses for the operation, conduct and playing of bingo. The statute strictly prohibits the net proceeds from bingo games from being used for any other purpose. For more detail on the regulatory aspects of bingo, see Chapter II (D)(1)(c).

Bingo is not regulated by the State of Florida. However, municipalities and/or counties that permit bingo have their own ordinances that govern its operation. Most municipalities require a business tax license, or occupational license, to conduct bingo. The licenses are issued annually and require copies of IRS financial statements.

Spectrum interviewed charitable bingo owners/operators, a bingo industry publisher as well as bingo equipment distributor executives in an effort to assess the size and state of charitable bingo in Florida.

In Florida, charitable bingo is conducted by charitable organizations on the premises of the qualified organization (such as a VFW hall, Elks Club, church, etc.) or at "bingo halls" that lease their premises to a charitable organization. The state statute also provides for a condominium association, a cooperative association, a homeowners' association or a mobile home owners' association to conduct bingo provided that any net proceeds after paying prizes and deducting operating expenses are donated to a qualified charitable organization.

Bingo halls and charitable organizations that utilize "hall-for-hire" arrangements must meet all state statutory requirements, including a minimum one-year lease agreement at a reasonable rental cost. Lease arrangements vary and often include "rent per session" or percentage of sales agreements.

Some bingo halls have lease arrangements with one "lead" charitable organization while others lease the premises to multiple qualified organizations. For example, Bingo Magic of Lake Worth, in Greenacres, has a "lead" charity lease arrangement with the Department of Florida Jewish War Veterans of the United States of America, and Bingo at Four Corners, in Pompano Beach, has lease agreements with 20 qualified charities with each charitable organization arranging to conduct a bingo session at the bingo hall on a scheduled day or night.

All charitable bingo conducted in Florida is run by volunteers who are members of the charitable organizations. In the bingo halls we observed, the facility's owner/operator and any other compensated employees are paid by revenues derived from the facility's food concessions.

Since bingo is not regulated by the State, the statewide total net proceeds from bingo games that is donated to charity is not quantifiable. Several bingo publications and/or websites list the available bingo games throughout the state; however, most of the published lists we

researched were not inclusive or current. Spectrum estimates that there are currently between 300 to 400 bingo active operations in Florida.

Based on our interviews with bingo owner/operators as well as others associated with charitable bingo in Florida, it is apparent that statewide participation in charitable bingo is trending significantly downward. The number of available bingo locations is dwindling and participation is rapidly decreasing. For example, daily attendance at Bingo at Four Corners is down from a highpoint of over 400 bingo players per day in the 1990s to an average of approximately 100 players per day currently. Historically, the amount of revenues received by charities from this bingo hall has gone from \$30,000 to \$50,000 per month in 1995 to approximately \$10,000 a month currently. In Palm Beach County, the number of bingo halls in has decreased from six to two since over the past decade. Moreover, the general increase in rent and fixed operating expenses paid by bingo hall operators for their premises continues to rise and has had a negative effect on net proceeds.

Based on our research, the downward trend in bingo in Florida is attributable to several factors including:

- Overall downturn in the national economy
- Competition from other forms of gaming including casinos, racinos and lottery
- Competition from high-stakes bingo conducted at tribal gaming locations
- Statutory-limited jackpot prizes of \$250 maximum
- Aging demographic of bingo players
- Statutory limitations preventing more progressive games
- Weather-related (hurricanes) events
- Proliferation of adult arcades and Internet cafes

Charitable bingo in Florida, as currently sanctioned, is increasingly less competitive. As each new form of gambling has been introduced – legal and otherwise – bingo revenues continue to decline. Those associated with bingo in Florida said the downward trend in bingo participation is multifaceted but pointed to the fact that bingo is unable to compete with the costly marketing efforts and giveaways of Indian casinos, pari-mutuel operators and high-stakes tribal bingo facilities. Most bingo players live fairly close to the bingo location, and in the regions with other forms of gaming located nearby, the revenue impact is most pronounced.

Bingo distributors we interviewed agreed with the observation that an overall downward trend due to competition from various other forms of gaming and the outdated \$250 statutory limit on jackpot prizes. They pointed to Miami-Dade and Broward counties as prime examples of where competition from the opening of racinos has substantially adversely affected bingo participation. For example, the number of bingo locations in Broward County has shrunk from eight to one since racinos have opened.

Florida's bingo operators indicated that the state's players tend to be older and are dying at a significant rate. Many are senior citizens who no longer drive or feel comfortable going out in the evening. These one-time regular bingo players now have expanded gaming options nearby and choose to frequent these facilities, which may offer bus transportation to casinos and/or racinos. However, the introduction in the 1990s of hand-held "card-minders" that automatically mark dozens of cards instantly has allowed older and/or handicapped bingo players to keep up and has leveled the playing field for many seniors and disabled patrons.

In Florida, the downward trend in net bingo proceeds directly impacts the charitable organizations intended to benefit from this activity. However, those associated with bingo interviewed by Spectrum all emphasized that bingo and expanded gaming can coexist if bingo is allowed to offer the right jackpot prizes and game content. Most agree that bingo, unlike other gaming options, is "a social thing" that people play with friends and relatives. Bingo is considered "social or soft gaming" that distinguishes it from harder forms of gaming such as casinos or pari-mutuel gaming.

Indeed, numerous published reports, including a recent *Wall Street Journal* article,²¹⁵ point to a renewal of bingo in the United States. Progressive approaches that include new technological advances, coupling bingo with other entertainment amenities, linked jackpots and higher prize offerings have resulted in more bingo participation by younger players and college students. Some of these innovative practices range from bingo being offered in bowling alleys and in venues that offer alcoholic beverages to specialized offering such as "hip-hop" and "cosmic" bingo. These newer, "hip" versions of bingo have given rise to younger patrons, particularly among the Hispanic population in South Texas, Arizona and California. Also noteworthy is a new approach in Illinois, where legislation has been introduced to allow bingo on hand-held devices in bars and restaurants.

The bingo equipment distributors we interviewed indicated that bingo participation across North America has been trending downward but provided several particular examples of upward trends in states where recent progressive statutory reforms have been implemented. For example, in Virginia and Minnesota, electronic pull-tab bingo and other newer game offerings have resulted in an increase in participation rates. Other progressive reforms, such as in Ontario, Canada, where new regulations provide for splitting proceeds between the bingo owner/operators and charities has resulted in significant upward trends in overall proceeds.

In several other states, the proliferation of Internet/sweepstakes cafes has adversely affected traditional bingo participation. Tim Stewart, President and CEO of Bingo King, a worldwide bingo equipment distributor, estimates that gross sales in states such as Ohio and California where Internet cafes have spread have declined more than 20 percent.

²¹⁵ Julie Jargon, "How Do You Spell Hipster? It Could Be B-I-N-G-O," *The Wall Street Journal*, Page A1, April 10, 2013 <http://online.wsj.com/article/SB10001424127887324883604578398973682460716.html>.

In Florida, the recent enactment of legislation that bans Internet cafes and adult arcade has adversely affected some bingo operators in the state who also had adult arcade games on their premises. The bingo halls we visited that previously had operational adult arcade games took the games out of play in order to comply with the new law.

The bingo operators with arcade games had previously offered prizes that were essentially free credits for regular bingo play. Many traditional bingo players would arrive well before the scheduled start of regular bingo and play the arcade games hoping to win free credits (such as “bingo bucks”) toward the cost of bingo cards for that day. It was also pointed out the extra time spent in the bingo hall usually resulted in the patron purchasing food or beverages at the hall’s concession. Now, bingo players have little incentive to arrive early because there are no “gaming activities” until the traditional bingo game starts. The loss of the adult arcade games in bingo halls have driven many bingo players to casinos and racinos where gaming is basically around the clock.

The legal challenges to the new Florida Internet cafes and adult arcades prohibition are currently ongoing and the final remedy is unclear at this time. Local law enforcement authorities now have enhanced tools to enforce the new law and recent published reports have documented considerable law enforcement efforts throughout every part of the state.

Gale Fontaine, President of the Florida Arcade and Bingo Association, said her trade group currently has about 215 members and has been losing bingo members steadily over the past decade. With all the recent developments regarding arcade games, she said the organization has over 50 new arcade members that joined this year. The connection between bingo and adult arcades is quite prominent with many bingo hall owners/operators also in the arcade business or having arcade games within the bingo hall itself.

Michael Wolf, the Bingo Association’s legal counsel, said the group has filed a lawsuit seeking to halt enforcement of the new law in regard to adult arcades. He said the same types of games are in bowling alleys and children’s arcades and the law is being enforced discriminatorily against the adult arcades.

In regard to the new law’s effect on traditional bingo, Dennis Conroy of *Bingo Bugle*, a monthly publication distributed in metro markets throughout the United States (including several Florida editions), pointed out that the new law may be a positive development for bingo in Florida. He said he it is likely that there will be an increase in applications for traditional bingo game operations due to the new law and the end result would be an increase in overall bingo revenues.

Florida also has one of the nation’s most prominent high-stakes Indian bingo markets. In fact, most point to Florida’s Seminole Classic Casino in Hollywood to be the birthplace of high-stakes Indian bingo. The Seminole Classic Casino is located across the street from the Seminole Hard Rock Casino. The one-story building started as a high stakes bingo hall about 30 years ago; however, the facility has slowly been transformed mostly into a slots-heavy casino with only

about 15 percent of the gaming floor still devoted to bingo. On a recent tour of the Seminole Classic Casino, Spectrum observed that the bingo room that once had over 1,500 seats is now down to about 400 seats. Seminole Gaming advised Spectrum that its bingo revenue for 2012 was \$4.1 million,²¹⁶ continuing a steady decline from \$24.6 million in 2001.

The Miccosukee Tribe of Indians of Florida, located in Miami, operates a 1,000-plus seat High Stakes Bingo Hall within its Resort & Gaming complex. The facility operates daily bingo games from 9 a.m. to 11 p.m. and has extensive bus service to the facility from throughout the greater Miami-Dade area. The bingo hall advertises over \$35,000 in daily bingo jackpots and has a large email promotion system that caters to regular bingo players.

Most observers agree that Florida's state-sanctioned model of charitable bingo is good for Florida, in that it provides needed funding for the state's many charitable organizations. Many of the bingo hall owner/operators have a genuine connection to the charitable organizations they help support. As Chris Thomas, owner/operator of Bingo Magic in Lake Worth, said for the system to work you have to be "in your community" through the charitable organizations that bingo helps to support.

Unlike the other forms of gaming available in Florida, bingo is distinctive in that it is truly a "social thing" that players often enjoy with friends and relatives. Its traditional role in charitable organizations is well documented in the state. Policymakers and stakeholders need to closely examine the role bingo plays in Florida so it can fulfill the intent of the original enabling legislation.

10. Lottery

a. Nationally

The first modern state lottery began in New Hampshire in 1964.²¹⁷ A large number of states began introducing lotteries in the 1980s, and currently, the only states without a lottery are Alaska, Alabama, Hawaii, Mississippi, Nevada, Utah, and Wyoming (although Wyoming in March 2013 enacted lottery legislation). By 2012, the Florida Lottery ranked third in the nation, behind New York and Massachusetts, in total sales revenue (FY 2011).²¹⁸ Each of these states had net receipts (total sales minus prizes paid and administrative costs) of over \$1 billion.²¹⁹ The following chart shows the trend in US lottery sales between 1990 and 2010, in nominal dollars. Gross sales (handle) represents total lottery sales for all states; net sales represents gross sales

²¹⁶ Bingo is currently offered at the Seminole Classic and Seminole Brighton casinos.

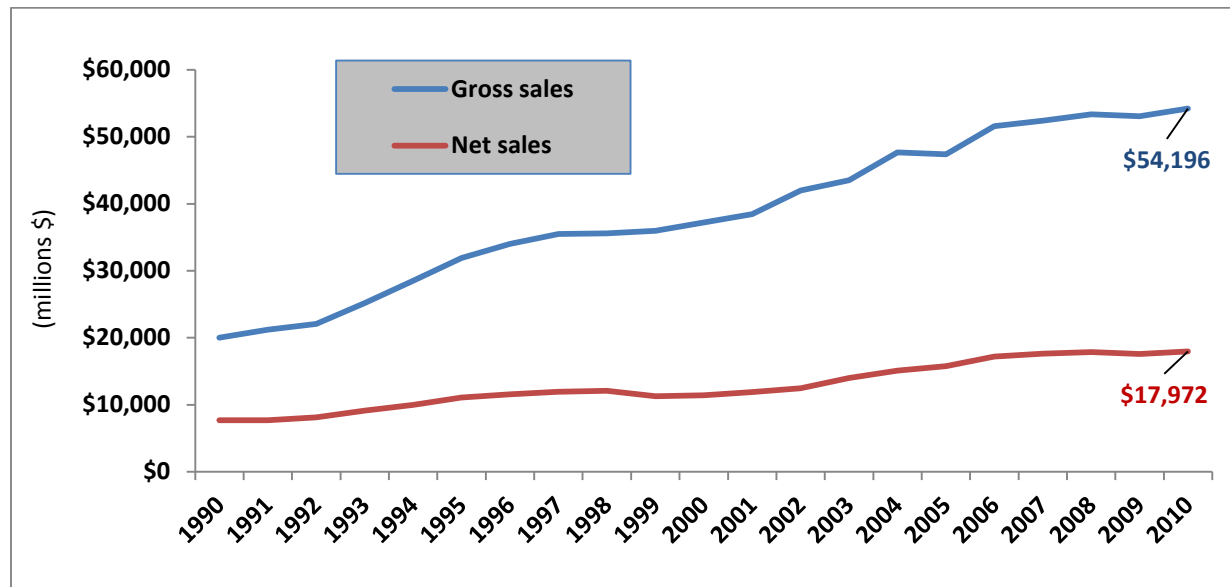
²¹⁷ Charles T. Clotfelter and Philip J. Cook, "On the Economics of State Lotteries," *Journal of Economic Perspectives*, vol. 4, 1990, p. 107.

²¹⁸ Teresa Markle La Fleur, Byron la Fleur, *La Fleur's 2012 World Lottery Almanac*, p. 259.

²¹⁹ Douglas M. Walker, *Casinomics*, 2013), p. 68.

minus prizes paid out and administrative costs, or the net amount of revenue for the states. As the chart shows, the net revenue to states has increased modestly over this period.

Figure 24: US lottery sales, 1990-2010



Source: US Census Bureau, *Statistical Abstract*, various years. For fiscal years.

As shown in the chart, lotteries raised almost \$18 billion for state governments in 2010. Lotteries are very popular among politicians because they are often viewed as a “voluntary tax.” That is, even though lotteries represent a relatively high tax rate on spending, citizens can easily avoid the tax simply by not purchasing lottery tickets.

Lotteries are, by far, the most profitable form of legalized gambling. For each \$1 ticket sold, the state keeps approximately 50 cents as “net revenue.”²²⁰ Roughly 10 to 20 cents is directed to administrative costs, and the remainder is paid out in prizes. Based on the data in the chart above the proportion of net revenue to states was roughly 40 percent in 2010 (over \$50 billion in gross sales and about \$18 billion in net revenue).

Despite the benefits touted by the lottery’s proponents, the lottery – like other forms of gambling – has its critics. A long-running criticism of lotteries is that the revenues tend to come disproportionately from lower-income individuals. As such, the lottery is a “regressive tax.”²²¹ In addition, studies have found that the benefits from lottery funded educational initiatives tend to accrue to higher-income individuals.²²² When combined with the tax effect, this compounds the

²²⁰ Thomas A. Garrett, “The Leviathan Lottery? Testing the Revenue Maximization Objective of State Lotteries as Evidence for Leviathan,” *Public Choice*, vol. 109, 2001, p. 104.

²²¹ Charles T. Clotfelter and Philip J. Cook, “On the Economics of State Lotteries,” *Journal of Economic Perspectives*, vol. 4, 1990, p. 112.

²²² Ross Rubenstein and Benjamin Scafidi, “Who Pays and Who Benefits: Examining the Distributional Consequences of the Georgia Lottery for Education,” *National Tax Journal*, vol. 55, 2002.

regressivity of the lottery. While critics have termed state lotteries “a tax on the stupid”²²³ due to their unfavorable odds, lottery play remains the most broadly popular and regionally widespread gambling activity both nationally, where 53 percent report playing the lottery within the past year,²²⁴ and within Florida, where 60 percent of residents report having played the lottery at least once in their lifetimes and 44 percent say they have played within the past year.²²⁵

A 2005 report from the Brookings Institution notes the following:

A number of studies have investigated the demographic predictors of lottery gambling and have tended to find that, on average, state lottery products are disproportionately consumed by the poor. ... The data reveal the following general trends. First, lottery gambling extends across races, sexes, and income and education groups. Second, black respondents spend nearly twice as much on lottery tickets as do white or Hispanic respondents.

The average reported expenditure among blacks is \$200 per year, \$476 among those who played the lottery last year. Black men have the highest average expenditures. Third, average annual lottery spending in dollar amounts is roughly equal across the lowest, middle, and highest income groups. This implies that on average, low-income households spend a larger percentage of their wealth on lottery tickets than other households. Interestingly, the regressivity of the state lottery appears to vary across lottery products.

Low-income lottery players are more likely than other lottery players to bet on instant games. Among NORC survey respondents who report playing the lottery, 38 percent of those in the lowest-income third report that they purchased an instant ticket the last time they played the lottery, compared to 27 and 19 percent of players in the middle and highest-income third. Higher-income players are more likely to have purchased a ticket on a jackpot lotto game - 56 percent of those in the highest-income third, 49 percent in the middle group, and 39 percent in the lowest-income third.

The NORC survey also asks respondents about their favorite state lottery game. Instant games are the most common reported favorite among those in the lowest-income third, while jackpot lotto games are by far the most common stated favorite among those in the higher income categories.²²⁶

Spectrum has asked the Florida Lottery for ZIP Code and other information related to examining both the proportion of lottery purchases in poor neighborhoods, as well as the proportion of tickets sold to non-Florida residents. As of this writing, Spectrum has not received a response.

²²³ James Walsh, *True Odds: How Risk Affects Your Everyday Life*, 1996.

²²⁴ *2013 State of the States*.

²²⁵ Robert J. Rotunda, Terry L. Schell, “Gambling and Problem Gambling Prevalence Among Adults in Florida: A 2011 Replication,” University of West Florida, January, 2012.

²²⁶ Melissa Schettini Kearney, “The Economic Winners and Losers of Legalized Gambling,” Brookings Institution, February 2005, p. 16 <https://www.documentcloud.org/documents/266971-the-economic-winners-and-losers-of-legalized.html>

Another criticism of lotteries is that, despite the fact that they are often earmarked for programs such as education, it is not clear that the overall level of funding for such programs actually increases. For example, politicians could reduce other types of education funding as lottery contributions to education increase. Thus, the lottery may result in a net increase or decrease to educational funding in a state.

A variety of research has examined the demographics of lottery players. Clotfelter and Cook have provided what is regarded as the most important economic research on lotteries. They find that “the most active 10 percent of [lottery] players account for 50 percent of the total amount wagered, while the top 20 percent wager about 65% of the total.”²²⁷ In addition, Clotfelter and Cook (p. 112) summarize:

- Men play more than women
- Adults play more in their middle years than when young
- Catholics play more than Protestants
- Lottery play falls with formal education
- 46 percent of laborers play; 25 percent of advanced professionals play
- Retirees and students play least of all
- Hispanics in the west and blacks in the east play more than non-Hispanic whites

The Ipsos Reid study for the Florida Lottery discusses demographics specific to Florida lottery players. The study includes a variety of survey questions aimed at understanding people’s opinions of the lottery and attitudes toward gambling in general. While 42 percent of respondents agreed that “lotteries are an innocent form of entertainment,” 19 percent indicated that they were “morally opposed to gambling.”²²⁸ This finding reflects the general differences in opinion that exist across the states.

Overall, state lotteries are the most common forms of legal gambling in the United States. In aggregate, lotteries generate far more income for states than any other form of gambling. Lotteries also provide employment and economic benefits, both from direct employment of approximately 440 employees²²⁹, as well as assistance to a large and diverse network of retailers throughout the state. The Florida Lottery provides local sales through a network of 13,138 retail agents who receive a 5 percent commission on ticket sales.²³⁰ This sales network operates

²²⁷ Charles T. Clotfelter and Philip J. Cook, “On the Economics of State Lotteries,” *Journal of Economic Perspectives*, vol. 4, 1990, p. 111.

²²⁸ Ipsos Reid, “2012 General Population Segmentation: Final Report, April 30, 2012 http://flalottery.com/exptkt/FloridaSegmentationFinalReport_30April2012.pdf.

²²⁹ Florida Lottery, Lottery Insider <http://www.lotteryinsider.com/lottery/florida.htm>.

²³⁰ Teresa Markle La Fleur, Byron La Fleur, *La Fleur’s 2012 Lottery Almanac*, p.66.

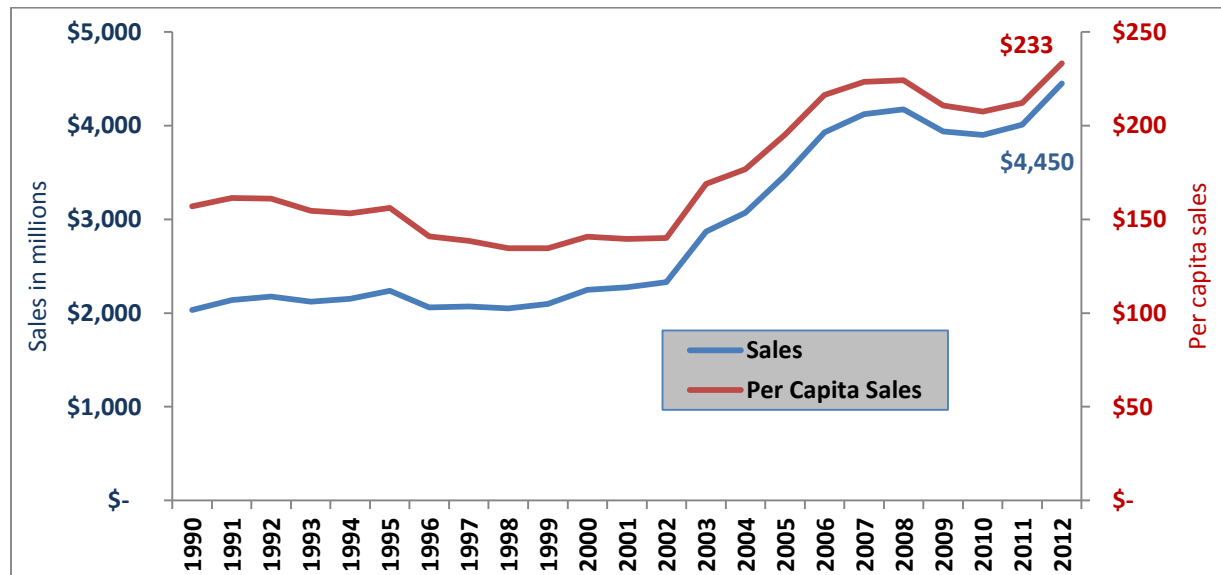
through a wide variety of establishments including convenience stores, gas stations, bars, restaurants, grocery stores, drug stores, liquor stores, newsstands, etc. Spectrum research in Massachusetts demonstrates the importance of lottery sales to the continued operation of these many small businesses providing entry level employment throughout the state.²³¹

b. Florida

Florida is one of many states that has adopted lotteries that earmark the revenues for special purposes, such as education. The Florida Lottery contributed over \$1.3 billion to the state’s Educational Enhancement Trust Fund during the 2012 fiscal year and \$24 billion since the lottery’s inception in Florida in 1988. Lottery revenues are used for scholarships for college students, construction and renovation on college campuses and at K-12 schools in the state.²³² Many states have similar programs that use earmarked lottery funds.

As noted above, the Florida Lottery is one of the highest selling in the country. The following chart illustrates Florida lottery gross sales and per capita sales from 1990 through 2012.

Figure 25: Florida lottery sales, 1990-2012



Data source: Florida Lottery, Florida Office of Economic & Demographic Research; for fiscal years

²³¹ Spectrum Gaming Group, *Facing The Lottery’s Future*, December 4, 2012; amended January 8, 2013 <http://www.masslottery.com/lib/downloads/leadership/pdfs/SpectrumGamingGroupFinalReport12-4-12Amended.pdf>.

²³² Florida Lottery, “Dollars to Education” <http://www.flalottery.com/education.do> (accessed May 9, 2013).

11. Retail Gaming

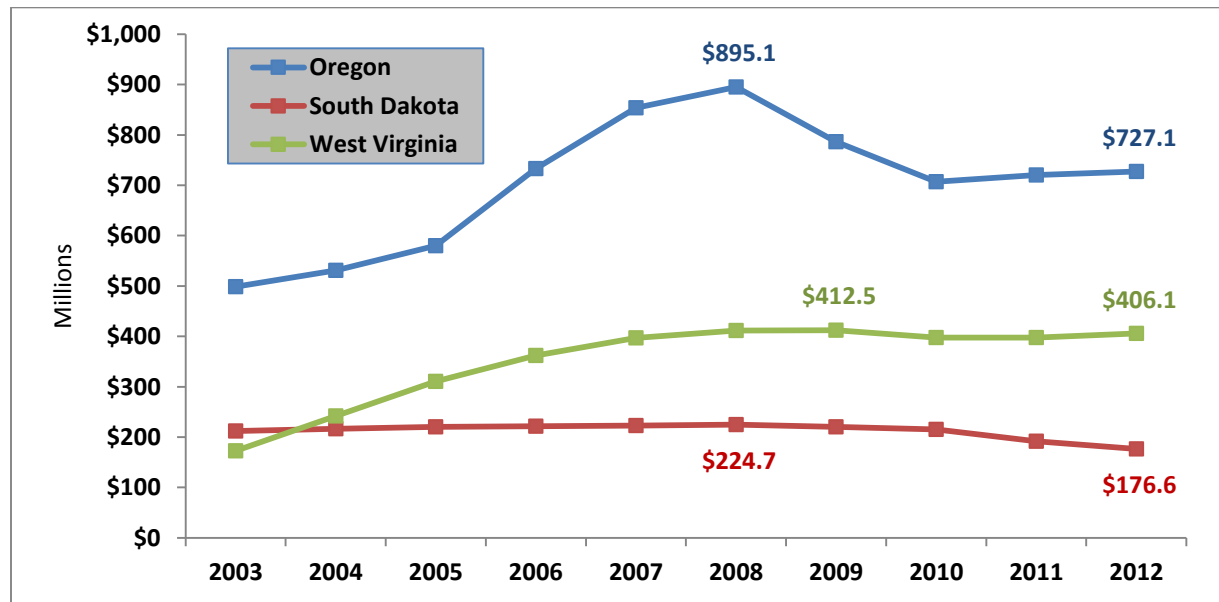
Seven states currently authorize what Spectrum terms “retail gaming,” which is the placement of a small number of electronic gaming devices (typically 5 to 10) in authorized retail locations – often liquor-licensed establishments. Electronic gaming device (“EGD”) is a catchall term for slot machines, video lottery terminals, video poker machines, electronic bingo game, or any other slot-like gambling machine. At year end 2012, EGDs operated in 12,042 locations in the seven states.²³³ In the five states where full-year data were reported for fiscal year 2012, the retail EGDs generated \$2.3 billion in gross gaming revenue.

In Illinois, Louisiana, Montana and Nevada, the retail gaming programs are regulated by their respective gambling control boards/agencies. In Oregon, South Dakota and West Virginia, the respective state lottery operates the retail gaming programs. The states use a variety of taxes, revenue sharing, franchise fees and/or device fees to collect revenue from the EGDs. The host establishments receive a share of the revenue based on a formula established by the state.

Retail gaming programs are seen as successful from a revenue standpoint because of their wide geographic distribution and convenience. However, they are controversial because the EGDs may be too convenient for those with, or susceptible to, gambling problems and because they may be in plain view of children.

Following are the revenue results – in net sales (i.e., gaming revenue) – for the three retail gaming programs operated by state lotteries:

Figure 26: Oregon, South Dakota and West Virginia lottery retail gaming revenue, 2003-2012



Sources: Oregon, South Dakota and West Virginia lotteries; for fiscal years

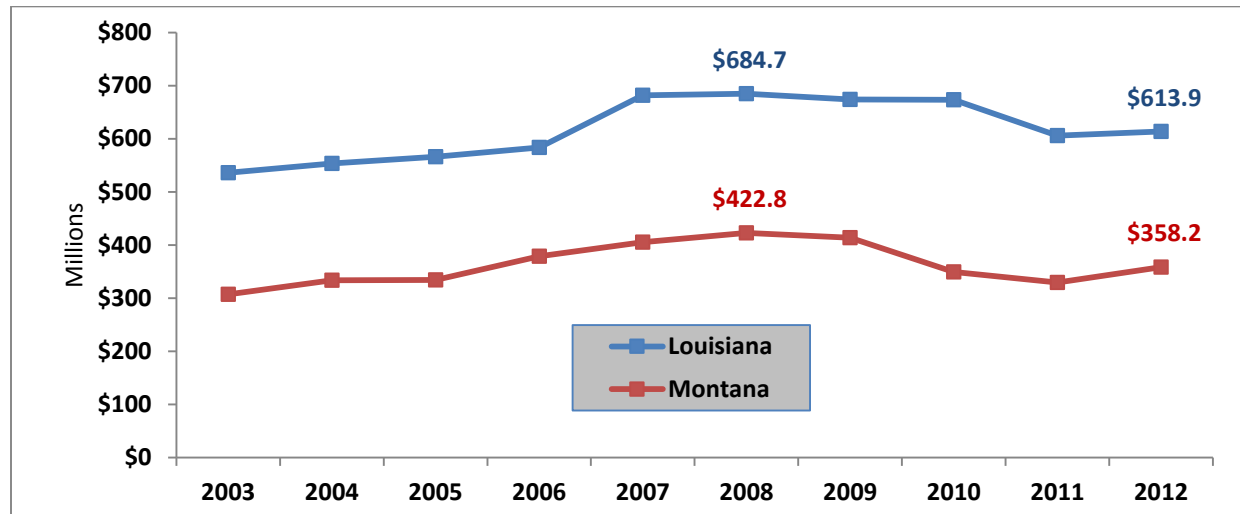
²³³ 2013 State of the States, p. 4.

Retail gaming is a crucial part of the three lotteries' total revenue: In FY 2012, Oregon Video Lottery net sales accounted for 69 percent of total lottery sales; the Video Lottery accounted for 88 percent of sales in South Dakota; and the Limited Video Lottery ("LVL") net sales accounted for 26 percent of total lottery sales – but 52 percent when excluding the racetrack casinos, which are also overseen by the Lottery.

The Oregon Video Lottery permits six EGDs in authorized liquor-licensed establishments and 10 at racetracks. The South Dakota Lottery permits 10 EGDs in liquor-licensed establishments. The West Virginia LVL permits six EGDs in liquor-licensed establishments and 10 in fraternal organizations.

As noted, four states authorize retail gaming that is independent of the lottery. Nevada does not report retail gaming revenue, and Illinois, which launched its program in September 2012, has yet to report a full year of results. The following chart provides the retail gaming revenue for Louisiana and Montana:

Figure 27: Louisiana and Montana retail gaming revenue, 2003-2012



Source: Louisiana and Montana gaming control boards/agencies; for fiscal years

In some states, enterprising businesses have attempted to create a casino-like environment by putting multiple authorized EGD locations side by side. In Oregon, residents and legislators have become concerned about a concentration of 12 such establishments that form “lottery row” on Hayden Island, near Portland. “For years they’ve watched a group of legitimate restaurants morph into ‘lottery row,’ a strip of 12, gaming-focused establishments where food takes a back seat to lottery games and cigarette and alcohol sales.”²³⁴ Oregon House Speaker Tina Kotek this year sponsored bills “that would give state and local governments dramatic new

²³⁴ Casey Parks, “Jantzen Beach's 'Lottery Row' will remain after Oregon lottery commission pulls proposed limits,” *The Oregonian*, August 5, 2012
http://www.oregonlive.com/portland/index.ssf/2012/08/jantzen_beachs_lottery_row_wil.html.

powers to shut down lottery outlets and bars that either gain most of their profits from video machines or become known for violent crime, drug dealing and excess noise.”²³⁵

Other states have considered retail gaming programs over the years, and Spectrum believes that states will continue to consider implementing retail gaming as other forms of gambling within their borders become saturated or difficult to legalize.

Key issues in considering the authorization of retail gaming include:

- Whether the easy accessibility could exacerbate problem gambling.
- Whether the devices would be in sight of minors who patronize a host establishment.
- Whether the EGDs would cannibalize existing casino or lottery play.
- The types of EGDs that would be allowed.
- The tax scheme/distribution of revenue.
- Which state agency would be responsible for directing and/or regulating the program.

12. Sports Betting

The 1992 federal Professional and Amateur Sports Protection Act (“PASPA”) outlawed sports betting while grandfathering the four states that already had authorized it in some form. The four states are Delaware, Montana, Nevada and Oregon.

Only Nevada offers traditional sports betting; i.e., the opportunity to wager on a single-event outcome, covering both professional and amateur sports, based on odds posted by the casino. A sports book operator sets the initial “line,” or odds of winning, and then typically adjusts the line based on wagering patterns and/or event information, with the goal of attracting the same amount wagered on both sides of the bet. The casino makes its money by effectively charging a commission on the bets, although it can incur a significant win or loss if a lopsided amount is wagered on the winning or losing team.

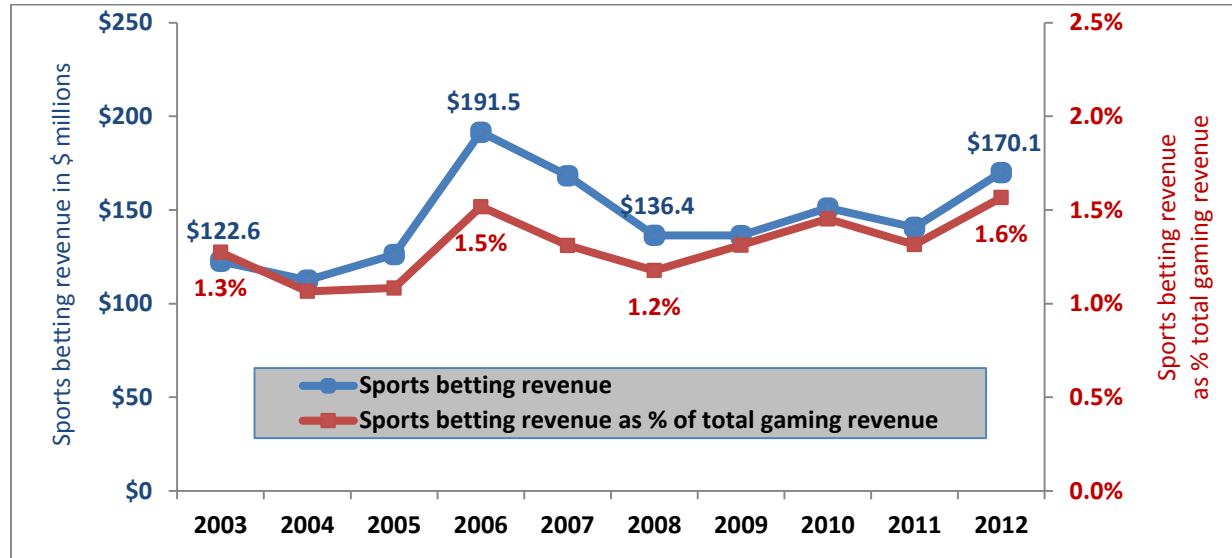
The Nevada Gaming Control Board regulates sports betting, as it does all casino games in the state.

Over the last 10 years, the Nevada casino industry has retained between 4 percent and 8 percent of sports betting wagers as net gaming revenue. Nevada casino operators generally describe their sports betting operations as “marginally profitable.” At large casino hotels, sports betting attracts many guests who otherwise might not visit the property – and who spend on food, beverage, lodging and other amenities. Further, sports bettors often are accompanied by a non-sports-betting partner who will play other casino games.

²³⁵ Harry Esteve, “Lottery ‘casinos,’ problem bars under assault by Oregon House speaker,” *The Oregonian*, March 20, 2013
http://www.oregonlive.com/politics/index.ssf/2013/03/lottery_casinos_problem_bars_u.html.

Over the last 10 years, Nevada sports betting revenue has accounted for between 1.1 percent and 1.6 percent of all gaming revenue. At the major casino hotels on the Las Vegas Strip over the same period, sports betting accounted for between 0.74 percent and 1.52 percent of all gaming revenue.

Figure 28: Nevada sports betting revenue performance, 2003-2012



Source: Nevada Gaming Control Board data

In 2012, 45 percent of the \$3.4 billion wagers made in Nevada casinos were on football, followed by basketball at 28 percent, baseball at 20 percent and other sports at 6 percent, according to the Nevada Gaming Control Board. Nevada’s sports books do a particularly brisk business leading up to the Super Bowl and NCAA basketball tournament. The Nevada Gaming Control Board reported that the state’s sports books took 2013 Super Bowl wagers of \$98.9 million and won \$7.2 million.²³⁶

The Nevada legislature in May 2013 defeated two bills that would have expanded sports betting:

- One would have allowed “entities” – as opposed to individuals – to place wagers. Such entities could be investment funds or other groups so long as they were based in Nevada.
- Another would have allowed wagering on the outcome of federal elections.

In Delaware, sports betting is restricted to parlay bets on National Football League games only. The parlay requires a bettor to wager on three or more individual games in one wager. “To win the bet, the player must win all the wagers in the parlay. If the player loses one wager, he

²³⁶ Nevada Gaming Control Board press release, February 4, 2013 <http://gaming.nv.gov/modules/showdocument.aspx?documentid=7577>.

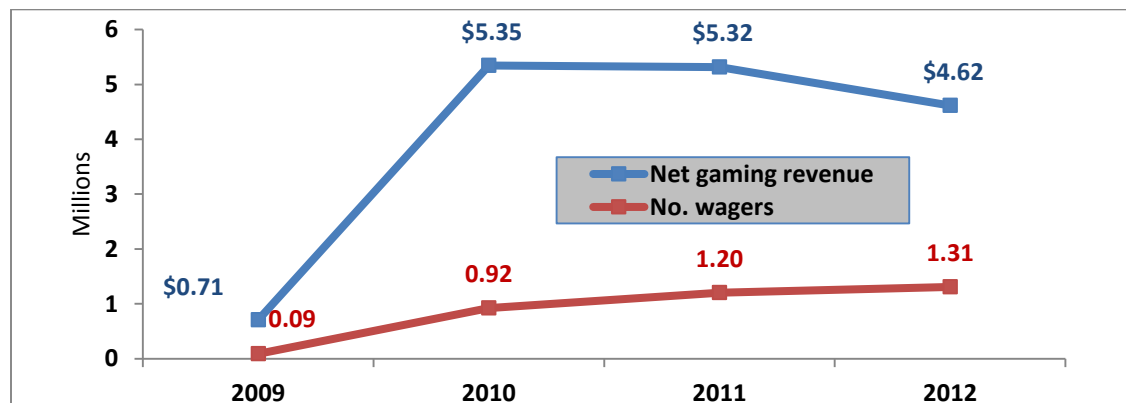
loses the entire bet. However, if the player wins all the wagers in the parlay, he wins a higher payoff than if he had placed the wagers separately.”²³⁷

Delaware in 2009 passed legislation to allow sports betting on all major sports, but a federal appeals court ruled later that year that the activity is restricted to the state’s pre-PASPA structure of allowing only NFL parlay bets. As such, the sports betting takes place only during the NFL season.

The Delaware Lottery is the state’s regulator and provider of sports betting, which is offered at both the state’s three racetrack casinos (also overseen by the Lottery) and, effective in 2012, at 31 authorized retail locations.

In 2012, Delaware reported \$19.7 million in sports betting wagers on 1.3 million wagers, resulting in net gaming revenue of \$4.6 million. Of the net gaming revenue, 86 percent was generated in the three racetrack casinos and 14 percent in the 31 retail locations. The following chart shows the Delaware sports betting results since its inception:

Figure 29: Delaware Sports Lottery performance, 2009-2012



Source: Delaware Lottery

Note in the chart above that revenue has declined despite an increase in wagers. This is because bettors were luckier/more skillful or, from the operator’s perspective, the lines may have been poorly set. Delaware operators say their sports books are barely profitable or break-even enterprises. As in Nevada, the real value of the sports books is that they generate traffic for other, more profitable segments within the gaming complex.

In Oregon, the Lottery offered Sports Action from 1989-2006, in which bettors would wager on NFL parlays and, for a lesser time, National Basketball Association parlays. The state ended all sports betting games as a condition of hosting NCAA basketball tournament games.²³⁸

²³⁷ Delaware Sports Lottery rules <http://www.delottery.com/games/sports/> (accessed May 3, 2013).

²³⁸ Anne Peterson of The Associated Press, “NCAA to bring bit of March Madness to Rose Garden,” *The Register-Guard*, July 7, 2006 <http://news.google.com/newspapers?id=SF1WAAAIAIBAJ&sjid=sfADAAAIAIBAJ&pg=4652%2C1191260>.

Montana does not offer traditional sports betting.

The federal ban on sports betting is currently being challenged by the State of New Jersey, whose voters in 2011 voted to authorize the activity. If New Jersey is ultimately successful, Spectrum believes other states would follow New Jersey in offering sports betting. Four states – Georgia, Kansas, Virginia and West Virginia – are supporting New Jersey’s appeal, not necessarily out of support for the cause but because they see it as a violation of “equal sovereignty” among states.²³⁹

The four major professional sports leagues and the NCAA vigorously oppose sports betting, believing it undermines the integrity of sports in two ways: It encourages fans to root based on a team “covering” the point spread as opposed to the actual game outcome, and it could make players susceptible to accepting bribes in exchange for point-shaving; i.e., ensuring that a player’s team covers or does not cover the point spread. Nevada regulators and sports book operators argue that by regulating and tracking bets, they are able to spot suspicious betting patterns that could signify nefarious activity.

Illegal sports betting towers over legal sports betting in size and scope. The National Gambling Impact Study Commission in 1999 reported that the size of illegal sports betting nationwide ranges from \$80 billion to \$380 billion annually,²⁴⁰ vs. \$2.9 billion wagered in Nevada’s sports books in 2011.²⁴¹

Globally, sports betting is projected to represent 10 percent of all land-based gambling revenue in 2013, according to London-based H2 Gambling Capital. On the Internet, however, sports betting is by far the most popular form of gambling, projected to represent 45 percent of the 2013 global total.²⁴²

13. Illegal/Unregulated Gambling

Unsanctioned and unregulated gambling has long taken place in every state and, by its nature as an “underground” activity, can be difficult to assess. The Internet site Havocscope, which profiles illegal activity globally, estimates that illegal gambling in the United States generates \$150 billion annually.²⁴³ As in most states, illegal gambling has a long and storied

²³⁹ John Brennan, “Haskell Invitational horse race gets a title sponsor,” *The Record*, May 7, 2013 http://www.northjersey.com/news/Four_states_back_NJ_challenge_of_federal_ban_on_sports_betting.html.

²⁴⁰ National Gambling Impact Study Commission (“NGISC”), *Final Report*, June 1999, p. 2-14 <http://govinfo.library.unt.edu/ngisc/>.

²⁴¹ American Gaming Association Sports Wagering fact sheet <http://www.americangaming.org/industry-resources/research/fact-sheets/sports-wagering>, accessed May 7, 2013.

²⁴² H2 Gambling Capital, Global Gambling Data summary, April 9, 2013.

²⁴³ Havocscope, “Illicit Trade Value: United States” <http://www.havocscope.com/tag/united-states/>.

history in Florida, beginning with the genesis of Florida's tourism economy. It has been said that for every hotel that Henry Flagler built, he also built a church and a gambling hall nearby.²⁴⁴

Unregulated gambling is the broader definition for these activities and it includes everything from slots and table games offered outside casinos, amusement or arcade machines, sports betting through bookies, privately-run sweepstakes and numbers games, cock or dog fighting, as well as private wagers between individuals. To catalogue and profile all forms of unregulated gambling is a large study in itself; for the purposes of this report we will provide an overview of the most prevalent types of non-sanctioned gambling and a brief description of the most prominent and widespread illegal or unregulated gambling activities in Florida.

The participation rates of Florida residents in various forms of illegal or unregulated gambling activities are documented in the 2011 survey sponsored by the Florida Council on Compulsive Gambling Inc. for lifetime, past 12 months, and past 7 days, as follows:²⁴⁵

Figure 30: Illegal and unregulated gambling participation in Florida, 2011

Gambling Activity	Lifetime %	Past Year %	Past Week %
Poker	22.1	12.0	3.4
Sporting Events Through a Pool	19.9	11.1	0.9
Cards/Dice/Dominos Not at Casinos	19.4	11.9	2.2
Bingo	19.1	5.7	1.1
Slot/Poker Machines Not at Casinos	18.7	7.2	1.2
Playing Sports Games	13.1	7.3	2.0
Table Games Not at Casinos	9.9	5.0	0.2
Sporting Events Through a Bookie	8.2	5.0	1.0
Pull-Tabs	7.4	2.9	0.3
Arcade or Video Games	6.8	3.8	0.8
Fantasy Sports	5.0	3.6	1.5
Internet Gambling	4.8	3.3	0.8
Car Races	2.7	1.2	0.6
Mah Jong	1.5	0.8	0.4
Cock or Dog Fighting	1.1	0.4	0.0
Policy, Numbers, or Bolita	0.8	0.5	0.1
Other	0.7	0.0	0.0

Source: Florida Council on Compulsive Gambling

The above table does not include playing the stock market, which was also profiled as a gambling activity in the FCCG study, while it does include poker played privately and betting on sporting events through a pool, which are generally perceived to be acceptable forms of wagering even if they are not regulated. Bingo is another generally accepted form of gambling,

²⁴⁴ Mary Ellen Klas, "Gambling's Long History in Florida," *Tampa Bay Times*, November 24, 2009 <http://www.tampabay.com/news/perspective/gamblings-long-history-in-florida/1054214>.

²⁴⁵ Robert J. Rotunda, Terry L. Schell, *Gambling and Problem Gambling Prevalence Among Adults in Florida: A 2011 Replication*, University of West Florida, January, 2012.

but unregulated bingo wagering can compete with charitable and regulated bingo operations elsewhere in the state. Unregulated gambling activities of more immediate concern include playing casino style games outside the casinos, sports betting through bookies, and numbers games offered outside the Florida Lottery.

It should also be noted that the 2011 FCCG survey, while carefully weighted and designed to be representative of Florida's diversity, completed less than 3 percent of its interviews in Spanish or Creole,²⁴⁶ which indicates that illegal gambling prevalence among Latinos and other minority groups may be somewhat underrepresented in the above findings. In addition, any survey questions regarding illegal or unregulated activities such as gambling are less likely to be openly and honestly answered by respondents, so it is reasonable to assume that the prevalence of illegal gambling activities may be higher than documented in self-reported surveys.

Until recently, Internet cafes offering sweepstakes games and arcades with gambling-style machines that offered cash-equivalent prizes operated through real or perceived loopholes in Florida law – in either case without regulation and enforcement; now they are explicitly illegal. Internet/sweepstakes parlors constitute a shadow gambling category which is now receiving increased attention across the country and has been banned in many states. Advocates contend that this is legal activity because players simply purchase Internet access time blocks and are not wagering money on the prospect of receiving a greater reward, which is the traditional definition of gambling. Critics argue that there is little difference between the electronic gambling devices employed and video slot machines, and those players are incited by the opportunity to win prizes with monetary value. In 2011 *Businessweek* estimated that there could be as many as 5,000 Internet cafes operating nationwide generating \$10 billion to \$15 billion dollars in revenue.²⁴⁷

On April 10, 2013, Florida Governor Rick Scott signed into law HB 155, which effectively proscribed sweepstakes gambling.²⁴⁸ This action followed the well-publicized Allied Veterans of the World prosecution which resulted in the arrest of 57 people in racketeering indictments for illegal gambling²⁴⁹ and eventually led to the resignation of former Lt. Gov.

²⁴⁶ Ibid.

²⁴⁷ Felix Gillette, "The Casino Next Door," *Businessweek*, April 11, 2011
http://www.businessweek.com/magazine/content/11_18/b4226076180073.htm.

²⁴⁸ Mary Ellen Klas, "Gov. Rick Scott signs Internet café ban bill into law," *The Miami Herald*, April 10, 2013
<http://www.miamiherald.com/2013/04/10/3334274/gov-rick-scott-signs-Internet.html>.

²⁴⁹ Mike Schneider, "57 Indicted in Florida Gambling Scandal," Associated Press, March 13, 2013
<http://www.wctv.tv/home/headlines/57-Indicted-in-Florida-Gambling-Scandal-197837441.html#.UZ5DrPzD-M8>.

Jennifer Carroll.²⁵⁰ At the time of the bill's passage, the Internet/sweepstakes gaming industry was estimated to be operating 1,000 Internet cafes statewide throughout the state producing approximately \$1 billion in annual revenue, according to the Florida League of Cities.²⁵¹ This legislation effectively banned Internet cafes and the "maquinitas" by included language which defines what constitutes illegal gambling and closing loopholes which have existed in Florida for decades and had allowed the earlier growth of unregulated wagering. Among other things HB 155 updates the definition of both illegal slot machines and legal arcade games, requiring that "amusement games or machines" must operate only "by means of the insertion of a coin" not swipe cards, and that, in order to be distinguished from "casino style games" they must be classified as games of "skill" rather than chance.²⁵² Specifically, the new legislation stipulates that legal machines cannot be "casino-style games in which the outcome is determined by factors unpredictable by the player or games in which the player may not control the outcome of the game through skill."²⁵³

The stricter interpretation of gambling in the legislation cited above also potentially impacts the approximately 200 "adult arcades" that offer slot style gambling outside of state or tribal-regulated slot machines as well as hundreds of children's arcades and arcade restaurants. These unregulated "amusement slots" represent a gray area of gambling activity and one which has been criticized both for taking advantage of seniors and for teaching minors and even children to gamble. Most adult arcades offer video gaming machines very much like the video devices found in Internet cafes but instead of buying time online players can win small prizes and gift cards. Adult arcades were specifically prohibited from dispensing gift cards as prizes in the recent legislation which also limits top prize values to no more than 75 cents.²⁵⁴

Unsurprisingly, Internet cafés, adult arcades, amusement arcades, and children's restaurants have fought the legislation.²⁵⁵ Internet cafés alone have been estimated to employ as

²⁵⁰ Aaron Deslatte, Amy Pavuk and Rene Stutzman, "Lt. Gov. Jennifer Carroll resigns amid federal Internet café probe," *Orlando Sentinel*, March 13, 2013 http://articles.orlandosentinel.com/2013-03-13/news/os-jennifer-carroll-resigned-20130313_1_Internet-cafes-jennifer-carroll-federal-probe .

²⁵¹ "Florida Internet Cafes, Legislative Indecision Requires Local Governments to Make Tough Choices," *Florida League of Cities* <http://www.floridaleagueofcities.com/Assets/Files/Pre-emptionThreatsInternetCafeDRussell.pdf> .

²⁵² The Florida Senate, "CS/HB 155: Prohibition of Electronic Gambling Devices," April 10, 2013 <http://www.flsenate.gov/Session/Bill/2013/0155>.

²⁵³ Ibid.

²⁵⁴ Kathleen Haughney, "Gov. Rick Scott signs bill banning Internet cafes," *Orlando Sentinel*, April 10, 2013 http://articles.orlandosentinel.com/2013-04-10/news/os-scott-signs-Internet-cafe-ban-20130410_1_florida-arcade-association-group-allied-veterans-gale-fontaine.

²⁵⁵ Mary Ellen Klas, "Gov. Rick Scott signs Internet café ban bill into law," *The Miami Herald*, April 10, 2013 <http://www.miamiherald.com/2013/04/10/3334274/gov-rick-scott-signs-Internet.html>.

many as 14,000 people who will now be unemployed.²⁵⁶ The Florida Arcade & Bingo Association has appealed in Broward County, so far unsuccessfully, the inclusion of arcades in the HB 155 legislation.²⁵⁷ So have trade associations for the restaurants, bowling alleys, skating rinks, etc., which also operate arcade style machines, sometimes using swipe cards. Companies such as Dave and Buster's and Chuck E. Cheese, which feature arcade-style games for youngsters, may also be affected under the new legislation by restrictions on prize value and requirements that arcade games not be games of chance.²⁵⁸

Internet café operators have previously sought injunctions to prevent local government bans prior to the enactment of HB 155, particularly the unsuccessful fight against the ban in Broward County. More recently, two arcade operators in Broward County, Boardwalk Brothers, Inc. and Play It Again Fla. LLC, filed for an injunction to HB 155, claiming that the law is "arbitrary, irrational, not reasonably related to a legitimate governmental purpose, and void for vagueness". This suit, filed in US District Court and naming Michael Satz, state attorney for Florida's 17th Judicial Circuit as defendant, saw the Seminole Tribe of Florida intervene as a defendant before U.S. District Judge James I. Cohn refused to grant the arcade plaintiffs an injunction against the law.²⁵⁹ Additional legal action is expected to be filed in Tallahassee on behalf of Internet café owners, gaming machine manufacturers, and software companies, according to persons involved in the industry.²⁶⁰ In addition, grass roots seniors groups, such as Seniors 4 Justice, are organizing in support of their local pastime, as well as legal teams from commercial restaurants with amusement arcades.²⁶¹

Amusement arcade slots have long been a feature of many East Coast beach resorts and can easily be found in states which already have legalized casino gambling, such as New Jersey, as well as those which currently have not, such as New Hampshire.²⁶² One primary issue

²⁵⁶ Kathleen Haughney, "Gov. Rick Scott signs bill banning Internet cafes," *Orlando Sentinel*, April 10, 2013 http://articles.orlandosentinel.com/2013-04-10/news/os-scott-signs-internet-cafe-ban-20130410_1_florida-arcade-association-group-allied-veterans-gale-fontaine.

²⁵⁷ Nick Sortal, "Seminoles also fighting suit filed by senior arcades," *Sun Sentinel*, May 17, 2013 http://articles.sun-sentinel.com/2013-05-17/business/fl-senior-arcade-appeal-051713-20130516_1_senior-arcades-arcade-association-florida-arcade.

²⁵⁸ Erin Sullivan, "Internet Café Law May Have Unintended Targets," *The Tampa Bay Times*, May 20, 2013 <http://www.tampabay.com/news/business/Internet-cafe-law-may-have-unintended-targets/2121416>.

²⁵⁹ Deshayla Strachan, "Arcades Fail in Challenge to Florida Gambling Law," *Courthouse News Service*, June 6, 2013 <http://www.courthousenews.com/2013/06/06/58300.htm>.

²⁶⁰ Ray Weiss, "Internet cafe fallout's 'personal side,'" *The Daytona Beach News Journal*, April 28, 2013 <http://www.news-journalonline.com/article/20130428/NEWS/304289997?p=2&tc=pg>.

²⁶¹ Glenn Garvin, "Despite law, cities quiet on kids' gaming machines," *Miami Herald*, May 13, 2013 <http://www.miamiherald.com/2013/05/12/3394108/despite-law-cities-quiet-on-kiddie.html>.

²⁶² Bob Sanders, "N.H. Already Has Slot Machines - And Lots of Them," *New Hampshire Business Review*, May 17, 2013 <http://www.nhbr.com/May-17-2013/NH-already-has-slot-machines-and-lots-of-them/>.

affecting whether these types of establishments catering to children remain open in Florida is whether they increase the chance for kids to become gamblers when they reach adulthood. Many gambling opponents view youth arcades as a “slippery slope” leading directly to full-blown adult gambling behavior.

The bill clarified the illegality of “*maquinitas*,” gray market video gaming machines similar to arcade slots but also housed in gas stations, convenience stores, restaurants, cafeterias, and bars throughout the state. The new law caused a reversal of Miami Mayor Tomás Regalado’s attempted policy initiative to regulate the *maquinitas* through municipal licensing and permit fees.²⁶³ Apparently, Mayor Regalado’s efforts to regulate the *maquinitas* were not successful. Since adopting an ordinance more than two years ago requiring each establishment to register for a \$500 permit fee, not a single *maquinita* operator has applied for the license.²⁶⁴ The passage of HB 155 has emboldened local law enforcement authorities to take action against small-scale *maquinita* operations, which are numerous in Florida. While no one knows exactly how many actually exist and what revenue they produce, Miami Police Chief Manuel Orosa estimates that there are more than 1,000 *maquinitas* active in his city alone, and each is non-compliant with the city ordinance.²⁶⁵

On June 4, 2013, the US District Judge James I. Cohn for the Southern District of Florida denied a motion by Broward County adult arcades Boardwalk Brothers Inc. and Play It Again FLA LLC for an injunction against HB 155. The arcade owners argued that the law was unconstitutionally vague and violated their First Amendment right of association. Among Judge Cohn’s conclusions was that because gambling is a vice activity and can be banned altogether, “the State has a significant interest in proscribing the behavior regulated in the statute.” The judge further found that “it is doubtful that patrons who are unable to frequent the Plaintiff’s commercial establishments will suffer any First Amendment harm.” The judge also noted that the statute is not forcing the arcades out of business, just limiting the types of games offered.²⁶⁶

Although bingo for money is legal in Florida if operated by charitable organizations and veterans groups which qualify for 501(c) or 528 status, instant bingo games in the form of pull

²⁶³ Charles Rabin, “Miami Police Make Raid and Seize ‘Maquinitas’ as Mayor Does About Face,” *The Miami Herald*, April 18, 2013 <http://www.miamiherald.com/2013/04/18/3352109/miami-police-make-arrests-and.html>.

²⁶⁴ Charles Rabin and Melissa Sanchez, “Miami says video-gaming machines known as *maquinitas* are illegal,” March 21, 2013 <http://miamiherald.typepad.com/nakedpolitics/2013/03/miami-says-video-gaming-machines-known-as-maquinitas-are-illegal.html>.

²⁶⁵ Charles Rabin, “Miami Police Make Raid and Seize ‘Maquinitas’ as Mayor Does About Face,” *The Miami Herald*, April 18, 2013 <http://www.miamiherald.com/2013/04/18/3352109/miami-police-make-arrests-and.html>.

²⁶⁶ *Boardwalk Brothers Inc., a Florida corporation, and Play It Again FLA, LLC, a Florida limited liability company, vs, Michael Satz, State Attorney for the 17th Judicial Circuit, in and for the State of Florida*; entered June 3, 2013.

tabs (except for those sanctioned organizations) or electronic bingo in all forms are not sanctioned under Florida law.

Another prominent illegal gambling activity in Florida is *bolita*, a numbers game imported from Cuba in the 1920s. The name “bolita” literally means “little ball” in Spanish and refers to a lottery drawing which first became popular among Cuban immigrants in Ybor City, where originally players tossed a sack filled with numbered balls back and forth between them until the round was called and the last person holding the bag withdrew a single ball with the winning number. Bolita’s peak popularity occurred in the Great Depression during the 1930s when it spread throughout the state. In 1938, Tampa featured approximately 125 bolita operations grossing as much as \$20,000 per day.²⁶⁷ The game spread with Cuban immigration to the north into New York and New Jersey, where “Spanish Raymond” Marquez built a bolita empire in the 1960s.²⁶⁸ Like all privately run numbers games in the United States, bolita gambling has been sidelined by the evolution of state sponsored lottery operations over the past 40 years. However, the prospect of superior relative odds, zero taxes, and cohesive immigrant community traditions have preserved bolita gambling, which still competes with the regulated Florida Lottery, and the game remains popular today across the straits in Havana.

Other forms of illicit and unregulated gambling in Florida include electronic bingo, cock fighting and dog fighting, betting on sporting events, and Internet gambling. Pitting animals against each other and wagering upon the outcome is an ancient human activity that is now so unacceptable to mainstream society that the practice, while still occurring frequently, is deeply underground and receives little public attention except for law-enforcement actions.

14. Conclusion

Gambling has evolved to become a major US industry, largely because it is popular and profitable – both for operators and for the states that tax and regulate it. All but two states (Hawaii and Utah) have some form of legalized gambling, although the size, scope, types, tax rates, and regulatory schemes vary by state. For reasons discussed in following chapters, the combination of consumer acceptance, technological advances (such as the Internet) and government desire for revenue will continue to cause further expansion. We return to the observation put forth by John Sowiński of No Casinos: “The solution to having too much of it (gambling) is to have more of it.”

Expansion comes at a cost, both internally to the industry and externally to society. Expansion runs the risk of cannibalizing certain types of gambling – notably the pari-mutuel industry, which has long been in decline both nationally and in Florida – and it will sharpen the debate about how much is too much. Importantly, expansion will further place a focus on

²⁶⁷ Schwartz, p. 381.

²⁶⁸ Ibid.

assessing the societal and personal costs associated with gambling; we discuss this in general terms in Chapter II (G) below.

The New US Frontier: Internet Gambling

1. Nationally

Internet gambling has become a reality in the United States only within the past year. On December 23, 2011, the Department of Justice issued an opinion in response to inquiries from the Illinois and New York lotteries reversing its long-held position and declaring that the 1961 Wire Act applies only to sports betting. This reversal opened the door to state by state legislation to regulate Internet gambling and online lottery sales.

Since the beginning of 2012 three states have passed such enabling legislation and each one follows a different model. Delaware was the first state to pass enabling laws and will roll out Internet wagering through a platform controlled and maintained by the Delaware Lottery. The state's three licensed racetrack casinos will offer branded websites offering most casino games and the lottery will offer Internet lotto sales. Nevada is the first state to actually regulate gambling operations via the Internet on April 30, 2013, as Station Casinos opened online operations through its partner, Ultimate Poker. As of May 14, 2013, UltimatePoker.com had surpassed 1 million hands of online poker.²⁶⁹ New Jersey quickly followed Nevada into legalized Internet gambling, with Governor Chris Christie signing legislation only five days after Governor Brian Sandoval did.

At this time, state-legalized Internet wagering is available only to residents or visitors currently located within a state's borders, as verified by geo-location software. Interstate compacting is expected to follow suit similar to US lotteries constructing interstate compacts for multi-state lottery games (such as Powerball and Mega Millions). A summary of US legal Internet gambling jurisdictions is found in the following table. At least 10 states are considering enabling legislation in a variety of forms, including California, Pennsylvania, Michigan, New York, Illinois and Iowa.

²⁶⁹ Dan Wetzel, "Ultimate Poker's legal online betting foray could be a game changer in the U.S.," Yahoo Sports, May 15, 2013 <http://sports.yahoo.com/news/spt--ultimate-poker-s-legal-online-betting-foray-may-be-a-game-changer-in-the-u-s---010335301.html> .

Figure 31: Legal US jurisdictions for Internet gambling

State	Legalization Date	Operator	Games Offered	Actual or Target Implementation Date
Delaware	July 23, 2012	Delaware Lottery	Lottery Casino (some games)	September 30, 2013
Nevada	February 21, 2013	Nevada casinos and partners	Poker only	April 30, 2013
New Jersey	February 26, 2013	Atlantic City casinos	Casino (all games)	November 26, 2013

Sources: Delaware Lottery, Nevada Gaming Control Board, New Jersey Division of Gaming Enforcement

The Internet has revolutionized a wide variety of US economic sectors over the past decade and a half as e-commerce has become firmly established as a major sales channel. One segment of the domestic economy where the Internet and mobile connectivity have notably not been major factors is in the field of gambling. Both commercial and tribal casinos in the United States, as well as domestic lotteries find themselves in the same situation demographically. Their core player base is aging and not being fully replaced by a younger generation. In casinos this is particularly true of slot machine patrons. For lotteries it is most prevalent among weekly instant ticket customers. Moreover, both casinos and lotteries frequently evidence the 80/20 rule, or the “Pareto Principle,” that 80 percent of revenue often is derived from 20 percent of the customer base. For both of these gambling industries, the prevalent demographic of the Internet user is under-represented in their own player base, thus the Internet and mobile channels constitute an opportunity for engaging future customers. Also, with Internet distribution channels, the breadth and frequency of play will often increase, thereby spreading the generation of revenue across a broader spectrum of the player base.

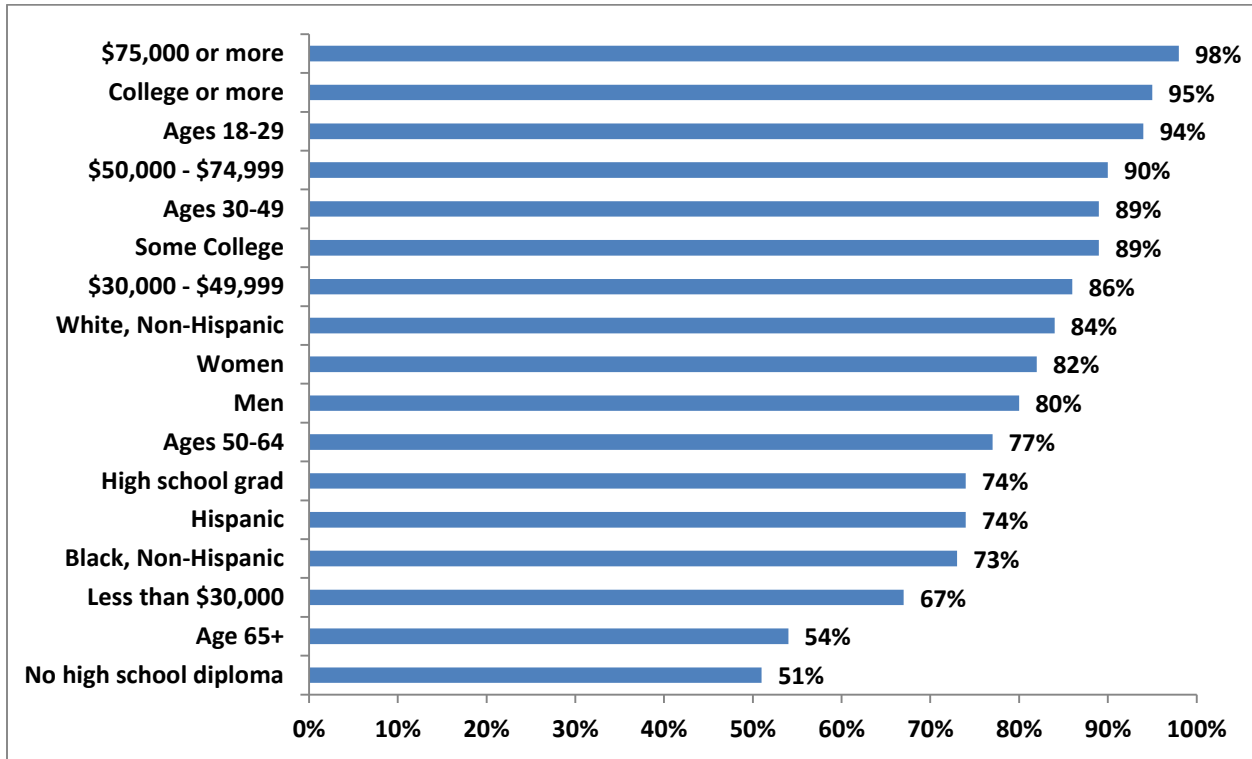
A strong majority of Americans use the Internet regularly. According to the Pew Research Center, as of December 2012, 81 percent of US residents use the Internet and 65 percent have broadband access.²⁷⁰ Regular and frequent Internet users demonstrate the following demographic traits: they are usually younger, better educated, more affluent, more likely to be working full time, and more likely to be earning more income than the population as a whole. Frequency of Internet usage tends to be consistently higher among younger demographic ranges. A nationwide Gallup Poll conducted in December 2008 found that Americans below the age of 50 spend the most time online: 62 percent of those under 30 spend more than one hour online per day, as do 54 percent of those people 30 or older but under the age of 50.²⁷¹ A more recent Pew Post Election survey confirmed these demographic statistics and indicated that Internet usage is

²⁷⁰ Pew Internet & American Life Project, Pew Research Center, Internet Adoption 1995-2012 [http://pewInternet.org/Trend-Data-\(Adults\)/Internet-Adoption.aspx](http://pewInternet.org/Trend-Data-(Adults)/Internet-Adoption.aspx).

²⁷¹ Gallup Poll, 2008 <http://www.gallup.com/poll/113638/nearly-half-americans-frequent-Internet-users.aspx>.

broadening among gender and racial demographics while remaining upscale in relation to income and educational demographics.²⁷²

Figure 32: Internet usage frequency by demographic group, 2012



Source: Pew Internet Post Election Survey, November 14 – December 9, 2012

Internet gambling also opens the door to new kinds of games not currently considered gambling, such as monetized social games and betting on the outcomes of peer-to-peer and massive multiplayer online games. Social games are generally played with others via a social network or on a social media platform. The potential size of this market is staggering. On October 4, 2012, Facebook reported that it had passed the 1 billion user threshold²⁷³ and half of these users are estimated to play some type of social game.²⁷⁴ The top five casino games played on Facebook are Double Down, Bingo Blitz, Best Casino, Slotomania, and Texas Hold'em. These five casino-style games on a single platform attract a total of 11,240,000 daily active

²⁷² Pew Internet Post Election Survey, November 14 – December 9, 2012, Pew Internet & American Life Project, December 2012 [http://pewInternet.org/Trend-Data-\(Adults\)/Whos-Online.aspx](http://pewInternet.org/Trend-Data-(Adults)/Whos-Online.aspx).

²⁷³ Somini Sengupta and Nick Bilton, "A Billion Users Raise Stakes at Facebook for Revenue," *The New York Times*, October 4, 2012 <http://bits.blogs.nytimes.com/2012/10/04/facebook-passes-1-billion-active-users/>.

²⁷⁴ Social Media Platforms for Gaming and Gambling, *Online Casino Reports*, October 13, 2012 <http://www.onlinecasinoreports.com/news/specialreports/2012/10/13/social-media-platforms-for-gaming-and-gambling.php>.

users.²⁷⁵ Social casino sites throughout the United States attracted a total of 35.4 million monthly players in 2012.²⁷⁶

The proportion of people who play for money on a social gaming site is fractional, usually in the low single digits, but multiplied by the total number of players on the site, the revenue quickly adds up. Monetized social gaming is estimated to have produced \$1.6 billion in revenue globally with \$660 million being generated in North America.²⁷⁷

While leveraging the Internet can deliver a broader audience to commercial gambling operations, the 24/7 access from the comfort of one's own home clearly increases the opportunity for problem gambling issues. Multiple studies show a potentially higher rate of problem gambling incidence for Internet gambling compared to land-based gambling, while multiple competing studies show identical problem gambling rates for both online and "offline" gambling. The Florida Council on Compulsive Gambling survey conducted in 2011 documented problem gambling prevalence within the state's general population at 2.1 percent for lifetime occurrence and 1.2 percent for past-year occurrence.²⁷⁸ These rates are generally consistent with the prevalence of problem gambling within land based gambling, benchmarked at 2.3 percent in 2008 according to the American Gaming Association,²⁷⁹ but should be carefully monitored if Internet gambling ever becomes legal in Florida.

2. Internet Poker Evolution

Poker was first introduced to the United States between 1810 and 1825 through New Orleans and originally developed from the German game *pochen* and its French derivative *poque*.²⁸⁰ This card game evolved to include draws and jackpots as it spread throughout the Mississippi valley and the American West during the second half of the 19th Century.²⁸¹ By the middle of the 20th Century poker games had become part of American culture and a frequent

²⁷⁵ Ibid.

²⁷⁶ SuperData Research, "Social Casino Metrics: Industry Trends & Analyses," August 2012
<http://www.superdataresearch.com/social-casino-metrics/>.

²⁷⁷ SuperData Research, "Social Casino Metrics."

²⁷⁸ Robert J. Rotunda, Terry L. Schell, *Gambling and Problem Gambling Prevalence Among Adults in Florida: A 2011 Replication*, University of West Florida, January, 2012.

²⁷⁹ "Casino Expansion and Its Impact on Pathological and Problem Gambling Prevalence Rates," American Gaming Association, <http://www.americangaming.org/industry-resources/research/fact-sheets/history-problem-gambling-prevalence-rates>.

²⁸⁰ Schwartz, p. 249.

²⁸¹ Ibid.

feature in residences. Due to its long history and wide popularity poker had come to represent the quintessentially American monetized social game.²⁸²

While poker enjoyed tremendous popularity among casual and social gamblers in homes and social clubs, it was not a popular casino game. In 1970 there were less than 50 poker tables in the city of Las Vegas and less than 70 in the entire state of Nevada.²⁸³ The reason for this low importance of poker as a casino game was its lack of profitability. Poker tables must be staffed with dealers and supplied with chips and amenities by the casino, rounds take a relatively long time but the game is played in competition with the other players and usually for small stakes with the casino only earning a rake of approximately one-tenth of the pot at the conclusion of each round. In 1970 it seemed certain that poker would remain a social game played for small stakes in private homes around den or basement card tables.

All that changed with the convergence of three sequential events: the establishment of the World Series of Poker, the advent of television coverage, and the development of the Internet. In 1970 the first official World Series of Poker (“WSOP”) was played at Binion’s Horseshoe in Las Vegas, a casino which at the time did not even have a poker room.²⁸⁴ From humble beginnings this competition grew to include the most well-known poker players of the time and eventually featured a million dollar prize for the winner, prominently displayed in a glass case at Binion’s. In its second year the WSOP Jack Binion changed the tournament format from an election to a freeze-out competition²⁸⁵ where participants post an entry fee and losing players are eliminated until the winner takes all. As interest in the tournament grew, television coverage was initiated in 1973 by CBS Sports and commentary was provided by Jimmie “The Greek” Snyder, himself a participant in the 1969 forerunner of the WSOP. The game which was favored in this tournament was no-limit Texas Hold’Em, where the audience could watch the first three community cards dealt to the center of the table – the flop – and suspense would build along with the betting as the fourth card – the turn – and the last community card – the river – were dealt. This format was much more attractive for television audiences than draw games where inscrutable “poker faces” were the only indicators as to what was going on in the player’s heads. As TV technology continued to evolve, by 2000 the television audience could also view players’ two hole cards via miniature cameras in the table surface which added even more suspense to the televised games.

The advent of Internet technology revolutionized poker tournaments by allowing huge numbers of players to qualify for tournaments through the Internet via satellite rounds. The initial WSOP competitions involved a dozen players in total. In 1982 the tournament drew 52

²⁸² *Gambling Impact and Behavior Study*, Report to National Gambling Impact Study Commission, National Opinion Research Center at the University of Chicago, April 1, 1999.

²⁸³ *World Series of Poker, A brief History, From Moss to Gold*, Nolan Dala
<http://www.wsop.com/wsop/history.asp>.

²⁸⁴ *Ibid.*

²⁸⁵ Schwartz, p. 413.

players and by 2000 there were 450 players.²⁸⁶ In 2003, the worldwide popularity of poker in general and the WSOP in particular exploded when an unknown amateur with a suitably relevant moniker, Chris MoneyMaker, won a seat at the tournament through a \$40 satellite round on PokerStars and went on to beat out 838 other contestants and win \$2.5 million in the final round.²⁸⁷ One year later a total of 2,576 players contested for a \$5 million first prize. In 2006, the pinnacle of WSOP popularity, a total of 8,773 players participated,²⁸⁸ the vast majority entering the tournament through Internet satellite rounds.

This timely convergence of television and Internet technology had caused online poker to skyrocket in popularity over the early portion of the last decade. However, in 2006 Congress passed the Unlawful Internet Gambling Enforcement Act (“UIGEA”), which suppressed Internet wagering by making it illegal for payment processors to handle gaming transactions. Internet poker participation in the United States crashed after passage of this legislation and many of the more reputable offshore operators, including Party Poker and 888.com, voluntarily withdrew from the US market. Despite UIGEA, a number of offshore sites continued to take bets from US players until April 15, 2011, now known in the industry as “Black Friday,” when the US Department of Justice entered indictments against Full Tilt, Absolute Poker, and Poker Stars and seized their assets and domain names.²⁸⁹ The indictments alleged fraud and in the case of Full Tilt the creation of a Ponzi scheme where player deposits were used to fund operations and salaries paid to celebrity player spokespersons. After the Black Friday indictments, US Internet poker participation truly plunged as players lost confidence in many offshore sites and withdrew their deposits. Some committed or professional players even established foreign residences in order to continue playing poker online.²⁹⁰

After UIGEA, most major Internet poker operators turned their sights away from the United States, a trend which accelerated after Black Friday, resulting in the development of a flourishing Internet poker in Europe. This market is dominated by Internet only operators based in offshore jurisdictions. It is also characterized by high volumes of players (liquidity), and intense competition among the top tier poker sites which results in low player retention, lucrative free play bonuses, celebrity player-sponsors, and due to all of the above, low operating profit

²⁸⁶ Schwartz, p. 477.

²⁸⁷ Toby Bochan, *The World Series of Poker Explodes in Popularity*, About.com
http://poker.about.com/od/tournaments/a/wsophistory_2.htm.

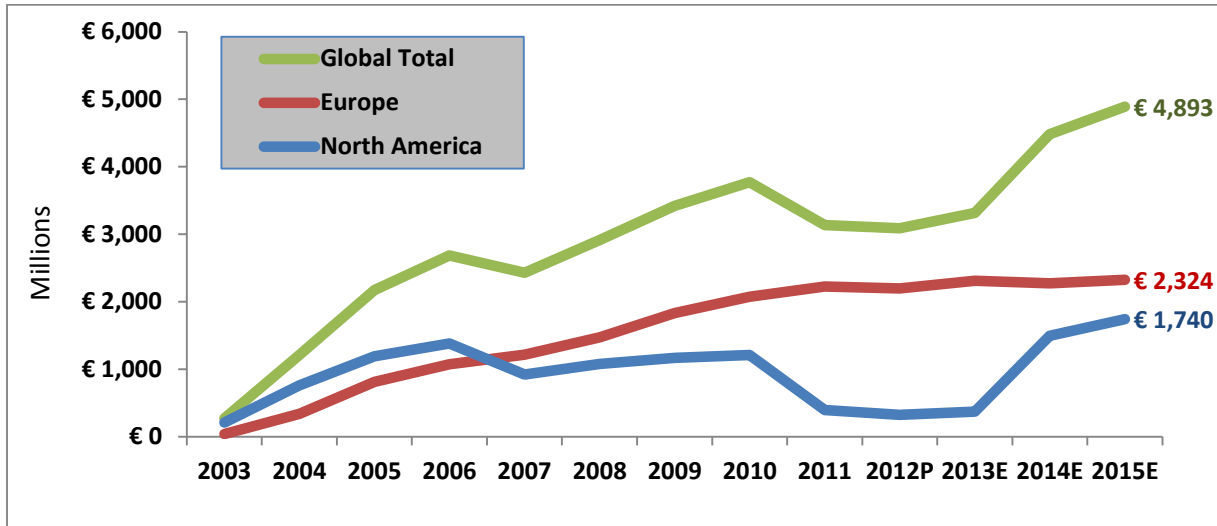
²⁸⁸ Ibid.

²⁸⁹ Chad Holloway, *The Black Friday Timeline: One Year Without Online Poker*, Pokernews, April 2012
<http://www.pokernews.com/news/2012/04/the-black-friday-timeline-one-year-without-online-poker-12445.htm>.

²⁹⁰ Bernard Lee, *One Year After the Black Friday Indictments*, ESPN.com
http://espn.go.com/poker/story/_/id/7816101/one-year-black-friday-indictments-steve-gboro780-gross-found-own-path.

margins. Since Black Friday, global Internet poker revenues have declined worldwide as the former boom continues to recede.

Figure 33: Internet poker revenues globally, Europe and US



Source: H2 Gambling Capital

However, this decline in the popularity of poker is expected to reverse dramatically in the next few years as Internet gambling becomes legal on a state by state basis in the United States. On December 23, 2011, the US Department of Justice issued an opinion in response to a request by the New York and Illinois state lotteries, reversing their previous position held for more than a decade that the 1961 Wire Act prohibited Internet wagering. Since then three states have passed enabling legislation for Internet gambling in the United States and all three follow different models. Nevada will offer poker only gambling through commercial providers licensed by the state. Delaware will offer most games currently featured at the three racetrack casinos licensed by the state through a central platform controlled by the lottery. New Jersey will allow Atlantic City’s commercial casino operators to offer all games currently approved by the Division of Gaming Enforcement over the Internet utilizing licensed providers. In addition, at the time of this writing, California has multiple bills legalizing Internet poker before the legislature and other states, including Illinois, Pennsylvania, Mississippi, Iowa, and New York have considered various bills to legalize Internet wagering.

3. Lotteries Online

Following the Department of Justice opinion of December 23, 2011, reversing its long held position that the 1961 Wire Act barred state lotteries from participating in online gambling, 13 states have introduced legislation regarding some form of Internet gambling. Illinois and Georgia quickly implemented legislation permitting online lottery ticket sales and are the only two US state lotteries currently leveraging the Internet sales channel.

Currently, lotteries in New York, Minnesota, New Hampshire, North Dakota, and Virginia offer some form of online subscription for lotto tickets. The Delaware State Lottery will begin selling tickets online as well as offering most casino games through a lottery controlled platform in September, 2013. Massachusetts, the most successful lottery in the nation based on per-capita sales, commissioned Spectrum last year to examine the issue of Internet sales and develop a strategy for implementation. Early this year Massachusetts introduced legislation authorizing tickets sales via the Internet. Maine has altered its gaming statute in response to the federal ruling, and Vermont has commissioned a study of the potential impact if Internet ticket sales were implemented.²⁹¹

Florida has also introduced enabling legislation for Internet lottery sales. Senate Bill 266, sponsored by State Senator Gwen Margolis (D-Miami) and co-sponsored by Representative Joe Gibbons (D-Hallandale Beach) through HB 275, was filed on January 17, 2013, but never advanced and has since died.²⁹² If passed, this bill would have authorized ticket sales over the Internet “via a subscription mechanism.”²⁹³ In May 2013, Michigan, after defeating prohibitory legislation in 2012, announced that the Michigan Lottery will be offering online sales through a system titled “iLottery” as early as spring, 2014.²⁹⁴

4. Conclusion

The Internet offers great opportunities nationally and internationally for all gambling providers, be they commercial, tribal, state lottery, or illegal/non-regulated, to expand their reach to a new audience that is often younger and more affluent than their current customers. Internet access promises to take gambling beyond the casino floor and into the living rooms and bedrooms of Americans which opens a whole new range of opportunities as well as potential problems. For both the casino industry and state lotteries, Internet gambling and ticket sales represent the future of gaming, offering the means to broaden their appeal, widen their marketing footprint and engage the next generation of players in order to replace aging player bases. At the same time, the increased convenience of Internet play also poses the issue of cannibalization of brick and mortar sales for all gambling providers, while 24/7 access to gambling in the privacy of one’s home raises the specter of increased problem gambling.

²⁹¹ 2012 Legislation Regarding Internet Gambling or Lotteries, National Conference of State Legislatures.

²⁹² Jessica Green, “Legislators file bill allowing online lottery in Fla.” WTXL News, January 30, 2013 http://www.wtxl.com/news/legislators-file-bill-allowing-online-lottery-in-fla-poll/article_eb5c9006-6aff-11e2-8c88-0019bb30f31a.html.

²⁹³ Ibid.

²⁹⁴ “Michigan Lottery Eyeing Internet Sales Launch in 2014,” *The Inquisitor*, April 30, 2013 <http://www.inquisitr.com/654782/michigan-lottery-eyeing-Internet-sales-launch-in-2014>.

The inability of the US Congress to debate and resolve the legality of Internet gambling left a vacuum over the past decade which was filled by offshore operators which now dominate a vibrant European Internet gambling market generating \$15 billion in 2012 and an expanding global industry estimated at \$34 billion last year.²⁹⁵ By 2015, Internet gambling is expected to represent 10 percent of all gambling revenue globally.²⁹⁶ Internet will likely continue to expand beyond the three states currently permitting the practice, absent passage of any federal legislation. A completely legalized US Internet gambling market would be estimated to generate \$7.1 billion after five years of operation. New York would be the largest market (\$1.02 billion), followed by California (\$984 million), Florida (\$786 million), Illinois (\$652 million), and New Jersey (\$570 million).²⁹⁷ Ranking as the third largest potential market in the United States, Florida would need to carefully consider the pros and cons of Internet wagering and develop an effective strategy for addressing the issue as more and more states can be expected to pass enabling legislation in the future

Overview of Gambling Regulatory Schemes

A general description of gambling regulatory schemes, including: State-operated, consolidated agency oversight, multi-agency oversight, and the use of local and state commissions; authorizing and revocation mechanisms; taxation schemes.

In this section we review the structure of the Florida gaming regulatory agencies as well as those of a number of other states and also address how each state addresses the most critical points of regulation.

1. Overview of Florida's Regulatory Structures

Preliminarily, we observe that each state has its own “personality” with regard to gaming venue, laws, history of gaming, priorities, etc., but there are also common themes that often, but not always, shine through regardless of differences. It is these themes of regulation that can be very instructive. Practices repeated are often in place for a good reason – because they have been considered important in many locations over long periods. This is not to say that they should not change if circumstances warrant, but it is important to understand the primary principles of gaming regulation.

The overriding regulatory interest that permeates all effective legislative schemes is the recognized need to engender public confidence and trust in the integrity of the regulatory process and gambling operations. To this end, regulatory agencies are charged with the responsibility of ensuring that unsavory and nefarious influences are prohibited from infiltrating the authorized

²⁹⁵ H2 Global Summary, H2 Gambling Capital, April 9, 2013.

²⁹⁶ Ibid.

²⁹⁷ US Regulated Internet Gaming Forecast, H2 Gambling Capital, April 9, 2013.

gambling industry. This mandate is especially important for an industry that historically has been susceptible to corrupt influences. In Spectrum’s experience, the linchpin of effective regulation is a comprehensive licensing process designed to ferret out unsuitable persons and entities from participating in this highly lucrative industry. In order for the regulatory apparatus to succeed, it is imperative that licensure be limited to those persons and entities that are able to demonstrate their good character, honesty and integrity.

There are also significant differences in the regulatory structures formulated to accomplish this laudatory objective of effective oversight. Of course, states have regulatory structures that are designed to account for their particular population, location and statutory requirements. For example, in Ohio the location and even the owners of the casino locations were part of the referendum initiative that was approved by the voters in 2010.²⁹⁸ Thus, the regulatory structure did not have a component for *selecting* an applicant, like Massachusetts, Maryland or Kansas. But the referendum did have a component for *evaluating* an applicant like virtually all states, which was tied to an affirmative showing of integrity and financial suitability.

In another example, many states, such as Pennsylvania, Kansas and Maryland, have a requirement for renewal of licenses, including the licenses of owners of casinos. Other states, such as Nevada and (at this time) New Jersey, have no such requirement, though both have a “call forward” provision which requires companies to provide additional information under certain conditions, with some discretion allowed by the persons in authority.

Many regulatory structures have been created and are almost unchanged from the original enabling legislation, some have had minor changes, and others have been radically altered since first implemented. Sometimes the length of time that a regulatory structure has been in existence has made a significant difference as to whether there have been changes. For example, one might expect New Jersey and Nevada to have made some changes to their regulatory structures because of how long the gaming industry has been operating in those states. Indeed, New Jersey has experienced radical changes just in the last few years to their regulatory agencies: the Casino Control Commission and the Division of Gaming Enforcement.²⁹⁹ On the other hand, Nevada has not had significant regulatory changes in many years.

Other regulatory structures have changed a moderate amount to accommodate the growth of their gaming industry but much of the regulatory apparatus has remained. For example, Iowa has changed primarily from a riverboat gambling state with considerable pari-mutuel gaming to a state that has mostly land-based casinos. Their regulatory structure has primarily expanded but not changed in form to take these changes into account.³⁰⁰ Maryland has reconstituted its

²⁹⁸ Ohio Ballot Board Final Language, Issue 3, 2009, p 9
http://www.sos.state.oh.us/sos/upload/publications/election/Issues_09.pdf.

²⁹⁹ New Jersey Senate Bill S12, signed into law on February 1, 2011
<http://openstates.org/nj/bills/214/S12/documents/NJD00021986/>.

³⁰⁰ See further discussion of Iowa’s regulatory structure in Chapter II(D)(2)(c).

Maryland Lottery to what is now the Maryland Lottery and Gaming Control Commission and Maryland Lottery and Gaming Control Agency and it now regulates casinos with slots and table games. Kansas at one time had a Racing Commission but now that agency has evolved into the Racing and Gaming Commission. Pari-mutuel gaming in Kansas has, at least for now, ceased.

a. Florida Regulation of Pari-Mutuel and Slot Machine Facilities

Chapter 849, Florida Statutes, generally prohibits the conduct of commercial gambling, unless expressly authorized by law. As an exception to the prohibitions in chapter 849, gaming is permitted at licensed pari-mutuel wagering tracks and frontons, pursuant to chapter 550, Florida Statutes, and also by the state operated lottery, pursuant to chapter 24, Florida Statutes. There are also Native American casinos in Florida and charitable bingo games. Free-standing, commercial casinos and slot parlors are not authorized in the state. The state earlier this year enacted amendments to chapter 849, Florida Statutes, that prohibit the operation of Internet/sweepstakes cafes.

Pari-mutuel wagering is authorized for horse racing, harness horse racing, quarter horse racing, greyhound racing, jai alai games and cardroom poker games. These forms of gaming activity are permissible only at a licensed pari-mutuel facility. In addition, slot machine gaming at pari-mutuel facilities is authorized in Broward and Miami-Dade counties. There are 27 pari-mutuel facilities located in Florida (plus inter-track at Ocala).

Chapter 550, Florida Statutes, provides for a comprehensive regulatory system with specific licensing and other regulatory requirements for the pari-mutuel industry. The Division of Pari-Mutuel Wagering (“PMW”) is the regulatory agency exclusively entrusted with oversight responsibility for these various authorized forms of gaming activity at pari-mutuel facilities. The PMW is a program area of the Department of Business and Professional Regulation within the Executive Branch of Florida’s government. (Annual Report of Division, 2011-2012) As detailed below, the Florida regulatory design empowers the regulatory agency with broad oversight and licensing responsibilities over all participants in the pari-mutuel gaming industry.

The Division has also been designated by the Florida Legislature as the State Compliance Agency with the authority to fulfill the state’s oversight responsibilities in accordance with the Gaming Compact between the Seminole Tribe of Florida and the State (section 285.710, Florida Statutes). The Seminole Tribe operates seven casinos in Broward, Hillsborough, Collier, Glades, and Hendry counties.

Notably, PMW has no authority to regulate other forms of gaming activity such as lottery, bingo or so-called cruises to nowhere. The Florida Lottery regulates lottery operations. Counties that permit bingo have their own individual ordinances which govern their operation. We also note that the Miccosukee Tribe does not have a gaming compact with the State and therefore operates exclusively under federal jurisdiction as a Class II gaming entity.

The Director of PMW is Leon M. Biegalski. The Office of the Director is responsible for such areas as budget planning; rule promulgation; policy development; legislative analysis of proposed legislation; strategic planning; and enforcement of administrative actions. There are six functional units which operate under the management of the Office of the Director: Auditing; Investigations; Operations; Slot Operations; Revenue and Financial Analysis; and State Compliance Agency.

The Office of Investigations is responsible for conducting background investigations of applicants for permits and occupational licenses and the enforcement and investigation of suspected violations that occur in pari-mutuel wagering, cardroom and slot machine gaming facilities. PMW says typical investigative cases include falsified license applications, criminal history checks, animal cruelty, and the use of performance altering medications and/or illegal substances during races. The Office of Investigations also conducts inspections of all new pari-mutuel, cardroom and slot machine facilities prior to opening and all facilities are routinely monitored by investigators to ensure compliance with the gaming statute and applicable regulations.

The Office of Auditing performs annual compliance audits to verify that statutory accounting procedures are utilized and to identify any fraudulent activity. The auditors reconcile pari-mutuel wagering pools for more than 80,000 races and games annually to ensure integrity in the wagering activity.

The Office of Operations is responsible for ensuring that the day-to-day operation of races and games are conducted appropriately, consistent with the statute and regulations. It is also responsible for administering the licensing process. All individuals and businesses who work or conduct business at a racetrack, fronton, cardroom or slot machine facility or who have access to money wagered, restricted areas and/or racing animals, are required to obtain an occupational license issued by PMW. Slot facility occupations requiring a license include, but are not limited to: slot operations managers; slot shift managers; floor supervisors; slot tech supervisors; slot technicians; slot attendants; security and surveillance personnel; count room and cage personnel; information systems managers; systems analyst supervisors; operations analyst supervisors; and revenue audit managers and supervisors.

Every racing and cardroom occupational license applicant is fingerprinted, and then re-fingerprinted at the time of license renewal five years after initial licensure. Every slot machine occupational license applicant is fingerprinted and then again every three years at renewal. Slot machine licensees pay an annual license fee of \$2 million and a regulator fee of \$250,000.

A slot machine business entity occupational license for slot machine management companies, service companies, manufacturers, vendors, distributors and testing laboratories is \$1,000 for a one-year license and \$2,000 for a three-year license. All officers, directors and shareholders with 5 percent or more interest in the business entity are required to be fingerprinted. Those persons who need to have access to the slot machine facility are also required to obtain a Slot Machine Business Employee Occupational License.

Annual cardroom operator licenses are issued to permit holders who operate cardrooms, with a fee of \$1,000 per table. Cardroom business licenses are issued to any cardroom distributor, management company, supplier or vendor conducting business with a cardroom. In addition, cardroom employee occupational licenses are required for all cardroom employees except food service, security, maintenance and mutuel teller employees. Possession of this license does not allow access to any restricted area other than the cardroom. A pari-mutuel/cardroom supervisor license is necessary for supervisors of food service, security, maintenance and mutuel teller employees who require access to restricted areas of the track as well as the cardroom. Finally, a pari-mutuel/cardroom employee license is needed for food service, security, maintenance and mutuel teller employees who require access to restricted areas of the track as well as the cardroom.

The Office of Slot Operations oversees the pari-mutuel facilities that have slot machine gaming. A key element of that regulatory oversight is to ensure that every slot machine has been certified by an independent testing laboratory. The Office of Revenue and Financial Analysis is responsible for safeguarding and accounting for state revenues derived from authorized pari-mutuel gaming activity.

The State Compliance Agency conducts inspections of Indian gaming facilities.

Though it appears PMW addresses most areas of the regulatory process we note that full commercial casinos are not yet present in Florida, and the state's law and policy has not, as of yet, been designed to encompass all regulatory aspects of a casino gaming regulatory agency. Additional or more in-depth regulatory processes may be needed when and if commercial casinos are implemented.

Division Application Requirements

The following are the filing requirements of the Division:³⁰¹

- **License term:** Florida Slot Machine Business Licenses are valid for the fiscal year (three-year licenses are also available). The application fee is \$1,000 for a one-year license, \$2,000 for a three-year license.
- **Officers and directors:** No license is issued. All Officers, Directors, and Shareholders of 5 percent or more interest in the business entity who do not need access to a slot machine facility in Florida, must submit a fingerprint card and the \$40.50 fingerprint processing fee upon submission of the Slot Machine Business Entity Occupational License Application, and an Authorization for Release of Information form must be completed. Any Officer, Director, or Shareholder of five percent or more interest of a business entity who needs access to a slot machine facility in Florida, must obtain a Slot Machine Business Employee Occupational

³⁰¹ Filing requirements provided by PMW.

License. Officer/director/ shareholder(s) must submit fingerprint cards and pay \$40.50 fingerprint fee the first year and \$16.50 every three years thereafter.

- An Authorization for Release of Information form must be completed for the business.

Note: Any business employee who needs access to a slot machine facility in Florida must obtain a Slot Machine Business Employee Occupational License.

The following is a detailed list of application requirements for a Slot Machine Business Employee license:

- An Individual Slot Machine Occupational License Application form must be completed.
- **License term:** Florida Slot Machine Business Licenses are valid for the fiscal year. The application fee is \$50 for a one-year license, \$100 for a three-year license, plus a \$40.50 fingerprint processing fee. An Authorization for Release of Information form must be completed for each employee. Applicants for Slot Machine licensing must be 21 years of age or older. Applicants must submit his/her fingerprints for a criminal history background check and pay the \$40.50 fingerprint processing fee when submitting an initial application. Every three years after the initial fingerprint submission, upon renewal, the applicant must pay \$16.50,

The disclosure forms required for natural persons require disclosure of prior license and criminal history information among other things. Though the disclosure requirements are substantial the forms that are used by PMW do not include a document on the order of the multi-jurisdictional disclosure form provided by the International Association of Gaming Regulators,³⁰² which is utilized by many casino gaming regulatory agencies. While this specific form is not essential to the process the disclosure of information that is required on that form is critical to the process of investigations.

Some specific information such as a financial net worth statement for natural person qualifiers is not required by the forms now utilized by PMW.

Additional Functions of PMW

In addition to these functions of a typical gaming regulatory agency for slot machine facilities, PMW also has comparable responsibilities for pari-mutuel wagering. The regulation of pari-mutuel wagering also includes many other functions such as the collection of urine and blood samples. PMW utilizes a racing laboratory under contract that collected over 86,000 samples in FY 2012.

³⁰² The multi-jurisdictional form is available online at several locations, including: <http://iagr.org/wp-content/uploads/Multi-Jurisdictional-Application.pdf> (accessed May 28, 2013).

Florida thus has already adopted a “consolidated regulatory agency” model in which one agency addresses almost all the regulatory functions, including pari-mutuel wagering. (Later in this report we will review a number of other states’ regulatory agencies and address the best practices of regulatory models.)

Changes to the Division because of Slot Machine Licensing

The absorption by PMW of the licensing function has significantly added to its staff. Before the implementation of slot machine licensing, the agency had 62 full-time employees. In FY 2013 there were 115 appropriated employees, 50 of which were dedicated to slot machine licensing. Four full-time-equivalent positions were added for oversight of the compact between the State and the Seminole Tribe. There would be significantly more staff added if full casinos were implemented.

Even with this increase in the PMW budget it is apparent that the agency is still heavily dedicated, in staff, to the regulation of pari-mutuel operations rather than slot operations, even though the State’s revenue comes by this time primarily from the operation of the slot machine operations. This is due to the numbers of facilities – 27 pari-mutuel operations vs. six slot operations.

b. Lottery

The Florida Lottery requires submission of a company application form and a host of other requirements for approval to be a lottery retailer.³⁰³ The application requires identification of the persons associated with the company who have a 10 percent holding and the identification of any criminal record for those persons. The disclosure form also requires a short explanation of the business operation.

Retailers must agree to a seven-page contract that addresses Public Entity Crime and the maintaining of certain bank accounts. Record-keeping and access to records by the Lottery is also required. The following is a description of the vendor registration process provided by the Lottery:

The Florida Lottery uses MyFloridaMarketPlace (the State of Florida's eProcurement system) which includes a statewide enterprise on-line vendor registration process. This system is designed to streamline interactions between vendors and state government entities that purchase goods and services, and provides a user-friendly Internet portal where vendors can register, receive information on upcoming bids, post information on products and services, and receive purchase orders electronically.

³⁰³Florida Lottery <http://flalottery.com/howToApply.do> (accessed May 24, 2013).

Section 24.103(6), Florida Statutes defines a “Vendor” as “a person who provides or proposes to provide goods or services to the department, but does not include an employee of the department, a retailer, or a state agency.”³⁰⁴

c. Charitable Bingo

Section 849.0931, Florida Statutes, authorizes the conduct, permitted uses of proceeds and limitations of bingo games by “charitable organizations.” These are defined as charitable, non-profit and veterans' organizations engaged in charitable, civic, community, benevolent, efforts or scholastic works and other similar activities. All charitable organizations must be qualified for exemption from federal income tax as an exempt organization under the provisions of section 501(c) of the Internal Revenue Code.

The statute mandates that all proceeds resulting from the conduct of the bingo games are donated to charitable organizations, less actual business expenses for the operation, conduct and playing of bingo. The statute strictly prohibits the net proceeds from bingo games from being used for any other purpose.

Section 849.0931, Florida Statutes, contains various other provisions intended to assure that the primary benefactors of the authorized bingo games are actually the charitable, non-profit and veterans' organizations, and not private persons. These include requirements that the operators must be bona fide members of the organization conducting the bingo game, must not be compensated for the operation of the bingo game, and must be residents of the community where the organization is located. The protective statutory provisions also include requirements that the property upon which the bingo games are held must either be owned by the worthy organizations or leased by worthy organizations for not less than one year, provided that the rent is not unreasonable for the location.³⁰⁵

Bingo is not regulated by the State. However, municipalities and/or counties that permit bingo have their own local ordinances that govern its operation. Most municipalities require a business tax license, or occupational license, to conduct bingo. Some require a special exemption waiver for that activity (bingo) in order to qualify for a business tax license. The licenses are issued annually and require copies of IRS financial statements.

d. Native American Casinos

The gaming Compact between the Seminole Tribe and the State (“Seminole Compact” or “Compact”) was executed by the Governor on April 27, 2010 and ratified by the US Department

³⁰⁴ Florida Department of Management Services
http://www.dms.myflorida.com/business_operations/state_purchasing/myfloridamarketplace.

³⁰⁵ Report of the Twelfth Statewide Grand Jury: The Operation of Commercial Bingo Halls in the State of Florida; October 25, 1995.

of the Interior on July 7, 2010.³⁰⁶ The Seminole Compact has a term of 20 years, expiring on July 31, 2030,³⁰⁷ although the expiration for house-banked card games (including blackjack, chemin de fer and baccarat) expires July 31, 2015, unless renewed.

The Seminole Compact authorized covers games at seven locations and also requires the tribe to regulate its casinos under specific internal control requirements.³⁰⁸ The Compact names the Seminole Tribal Gaming Commission (“Gaming Commission”) as the tribal governmental agency that has the authority to carry out the Tribe’s regulatory and oversight responsibilities.³⁰⁹ The Compact also provides for the monitoring of the tribal casinos by the State.³¹⁰ Licensing is also addressed in the Compact.³¹¹

The Gaming Commission has established a regulatory structure that Spectrum believes is thorough and substantial. Ed Jenkins is Director of Compliance and Regulations for Gaming and has significant experience with the FBI and with the gaming industry. He indicates he has worked for the tribe since 2001 and has established a regulatory agency that was designed to be independent and capable. Perhaps an example of this independence is the requirement that surveillance departments within the casinos are required to report to the Gaming Commission and not to operations.

The surveillance department is critical to internal controls because it is designed to be the eyes and ears to any crime that may be occurring at the casino floor. It is the last line of defense against crimes committed by any patron or employee, including management. In Spectrum’s experience, often casino management will balk at providing sufficient staff to the department and argue against creating a reporting line which establishes a point of view which is free from influence by casino management. Spectrum believes a reporting line that goes to casino operations leaves a casino vulnerable to a host of crimes, including collusion at the highest levels.

The fact that the Gaming Commission requires this independence is one sign that regulatory requirements are being taken seriously. There are other signs as well. Gaming Commission staff is present at the casinos 24 hours a day, seven days a week. The license process, including the licensing or registration of all employees, seems significant (though

³⁰⁶ Department of the Interior News Release July 7, 2010.

³⁰⁷ Seminole Compact, p 49

³⁰⁸ *Ibid.*, p. 13 and 14.

³⁰⁹ *Ibid.*, p. 3 and 23.

³¹⁰ *Ibid.*, p. 25.

³¹¹ *Ibid.*, p. 31.

Spectrum notes there is no renewal to a license).³¹² The fact that someone of significant experience such as Ed Jenkins was hired is another indication of the significance that the Seminole Tribe has placed on regulation. It is also important that Jenkins's reporting line appears also to be independent from casino management influence.

2. Regulation in Other States

Spectrum reviewed and analyzed gaming laws and interviewed representatives from several other states. In addition, we reviewed the Florida Senate interim report of October 2010, *Review of Casino Gaming in Other States*.³¹³ Based on our experience working for, with, and studying, state regulatory agencies across the country, we selected several gaming commissions for discussion in this report that we believe would be insightful into various regulatory models.

a. Introduction: Establishment of Standards

All states and many foreign jurisdictions require companies to apply to be a casino operator, and require companies to show qualification in such areas as good character, honesty, integrity, the absence of a criminal record, and financial stability. There are variations in the extent to which persons associated with the company and associated companies must file and establish these standards. Most, if not all, states that have implemented casino gaming, or are in the process of doing so, such as Massachusetts, Maryland, Kansas and Ohio, require parent companies as well as all those natural persons with an ownership interest beyond a certain percent (5 percent is often used) to file and establish these qualifications. In addition, those officers, board members and executives deemed to be qualifiers due to their prominence in the company must demonstrate these qualifications. Since these associated companies and natural persons can have an influence over the casino operator it is incumbent upon a state to require the establishment of such standards.

The selection of casino operators is the starting point of establishing public trust in the casino industry as one of integrity. It is critical that this step be completed carefully and thoroughly. Through this process the state is not only establishing that the gaming industry is one of integrity, but that the selection of who will be a casino operator has been done with integrity by the state. In cases where the selection process was called into question (see Chapter II[E][1]), the expense to the state of re-establishing that trust can be enormous.

³¹² Phone interview with Ed Jenkins May 17, 2013. Jenkins did note, however, that if an employee changes positions there is an additional investigation.

³¹³ Florida Senate, Review of Casino Gaming in Other States, October 2010
<http://www.flsenate.gov/Committees/InterimReports/2011/2011-133ri.pdf>.

b. Bid Process or Non-Competitive Application

Beyond requiring of the qualification standards noted above, licensing decisions depend on basic policy: The state must decide how and in what way it wishes to limit the numbers of operating casinos, or whether unlimited numbers of casinos may be issued. There are two primary methods for awarding licenses: competitive bidding and non-competitive applications. The former process occurs in situations where there are a finite number of licenses permitted in a particular region, while the latter method is utilized in instances where an infinite number of licensees are permitted by law. For both methods, there are still essential qualification requirements relating to a person's and an entity's showing of good character, honesty and integrity.

If a state determines the demand is great enough, an unlimited numbers of casinos may be appropriate, but the state must address if that level of competition would potentially saturate the market and negatively affect the financial viability of the businesses involved. Nevada allows unlimited numbers of casinos in unlimited locations; all other states have some limitations.

Limitation to a specific area of the state can create a destination area. For example, New Jersey's requirement that casinos be located in Atlantic City was intended to create just such an area. States such as Pennsylvania, Maryland, Kansas and Massachusetts limit the number and types of casinos that are permitted and their location. Within those limits these states required a competitive bid process that required applicants to show the value of their application in such areas as economic development and job creation in the area.

c. Regulatory Structures Consolidated or Separated Oversight

Although generalizations can be made about regulatory models, no two states have regulatory agencies that are truly comparable in all respects. There are simply too many unique forums, too many different types of gaming venues, and too many unique legal structures in every state. The states addressed below, while not intended to be a complete survey of every state, are illustrative of both the uniqueness of different states' regulatory structures and their similarities.

Massachusetts

The Massachusetts Gaming Commission ("MGC"), which has begun the process of awarding four casino licenses, was created by law in November 2011. That law provided for commercial casinos in the state, created a provision which could allow for an Indian casino, and brought the pari-mutuel industry under the auspices of the MGC.³¹⁴

³¹⁴ Massachusetts Expanded Gaming Act, Chapter 194 of the Acts of 2011 <http://massgaming.com/about/expanded-gaming-act/> (accessed May 28, 2013).

This law also created one agency, whose five members serve full-time, and which consolidated responsibilities and authorities for investigations, prosecution of violations, policy formulation and decision making. With the exception of the Massachusetts Lottery, the MGC has wide reaching purview over gaming matters.

Thus the MGC is an example of an agency which has consolidated oversight. An important part of this consolidation is the Investigation and Enforcement Bureau (“IEB”), the “primary enforcement agent for regulatory matters.”³¹⁵ The IEB has numerous responsibilities, including the authority to conduct or limit investigations,³¹⁶ the decision on certain license matters and the holding of relevant hearings.³¹⁷ The IEB is a law enforcement agency and works directly with and will include members of the Massachusetts State Police. Because of its designation as a law enforcement agency it can request fingerprint criminal records checks directly from the FBI. The Massachusetts Expanded Gaming Act takes measures to assure the independence of the IEB’s investigations, specifying that the commission “shall not place any restriction upon the bureau’s ability to investigate or prosecute violations of this chapter or the regulations adopted by the commission.”³¹⁸

In many states, there are agencies or bureaus that have the responsibilities of the IEB but which are separate from the gaming commission/decision-making authority. Some of these agencies are part of or connected to the State Police and many times they report to the Attorney General of the state. In Massachusetts the IEB reports to the MGC, which has ultimate authority over license decisions and policy matters. And the IEB is only one of a wide range of consolidated responsibilities under the auspices of the MGC.

Another consolidation that has taken place in Massachusetts is the fiscal authority and responsibility which has been given to the MGC. The MGC is the trustee for the many funds created by the Expanded Gaming Act and for all revenue collected by from the commercial casinos.³¹⁹ In many other states trustee responsibilities are under the authority of the State Treasurer.

Still another responsibility under the MGC is that of the Racing Commission. The Racing Commission was a separate agency until passage of the Expanded Gaming Act, but now is under the authority of the MGC. Thus the MGC is a host racing commission and an off-track betting

³¹⁵ Ibid, Section 6. Although the IEB is part of the MGC it is also required to work in conjunction with the Attorney General’s Office on criminal matters, pursuant to Section 6.

³¹⁶ Ibid., Section 12b.

³¹⁷ Ibid., Sections 30 and 31.

³¹⁸ Ibid., Section 34.

³¹⁹ Ibid., Section 4.

commission and also has responsibilities over simulcasting.³²⁰ Despite this, the MGC is primarily a gaming commission, with the majority of its resources and staff devoted to casino gaming.

In Massachusetts, the extensive responsibilities of the MGC can be represented in chart form, as indicated below. All functions, relating to gaming, with the exception of the lottery, are encompassed under the purview of the MGC, although the Attorney General also will have investigative authority into casino criminal activities.

Figure 34: Massachusetts gaming regulatory structure



Source: Massachusetts state agencies, Spectrum Gaming Group

Ohio

The State of Ohio is a contrast to Massachusetts in that there are several agencies involved in the regulation of gaming. The Ohio Casino Control Commission (“OCCC”) has the primary responsibility for regulating the four commercial casinos but other agencies are involved as well. The OCCC is comprised of seven members who serve as part-time officials.³²¹ The Ohio Bureau of Criminal Identification is involved in the license application process as the agency responsible for receiving reports from the FBI.³²² The Division of Taxation is responsible for

³²⁰ Ibid., Section 7.

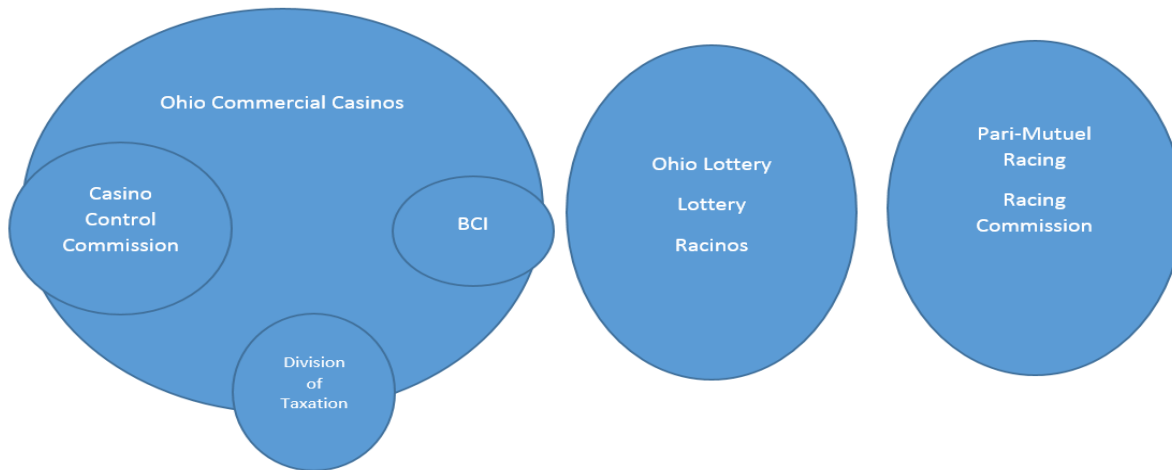
³²¹ Ohio Revised Codes Chapter 3772 <http://codes.ohio.gov/orc/3772.02> (accessed May 25, 2013).

³²² Ibid., Section 3772.07.

collection of the gaming revenue.³²³ The Ohio Lottery is a separate agency that oversees the traditional lottery as well as racetrack VLTs. The Ohio State Racing Commission oversees Pari-mutuel gaming and Racing.

This separation of responsibilities is depicted in the following diagram:

Figure 35: Ohio gaming regulatory structure



Source: Ohio state agencies, Spectrum Gaming Group

Maryland

In Maryland a 2012 referendum approved table games at the existing slots casinos.³²⁴ The change re-constituted the State Lottery as the State Lottery and Gaming Control Agency (“LGCA”).³²⁵ This agency now has regulatory responsibility and authority over the commercial casino industry as well as the Lottery. The change resulted in the addition, at one time, of 44 employees for the agency to handle the added responsibilities of table games.³²⁶ Maryland’s gaming industry evolved from the lottery and the regulatory agency has evolved to handle the significantly greater responsibilities of a gaming agency as well as the lottery program.

³²³ Ohio Department of Taxation website, http://www.tax.ohio.gov/gross_casino_revenue.aspx (accessed May 20, 2013).

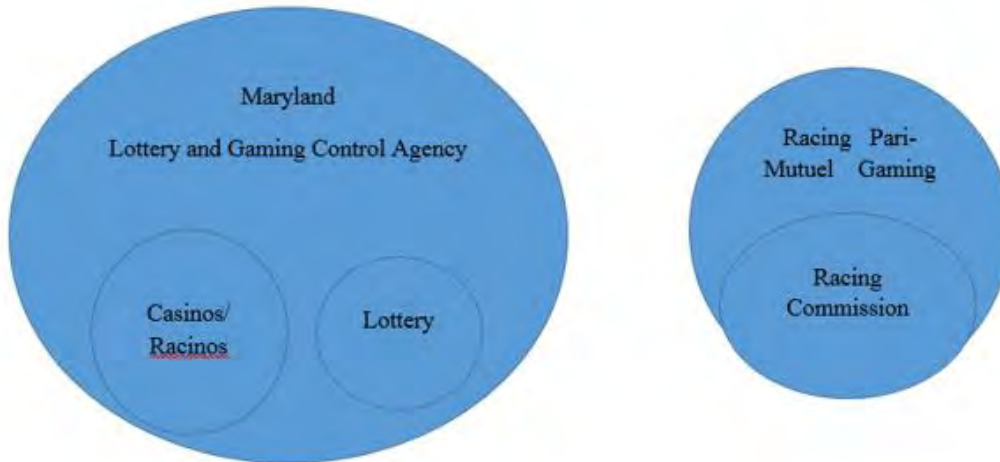
³²⁴ Maryland Gaming Expansion Question, Question 7 (2012) http://www.elections.state.md.us/elections/2012/ballot_questions/Question_7_Summary.pdf (accessed May 25, 2013).

³²⁵ August 2012 Special Session on Gaming in Maryland from the Governor’s Website <http://www.governor.maryland.gov/session.asp> (accessed May 24, 2013).

³²⁶ *Baltimore Business Journal*, November 15, 2012 <http://www.bizjournals.com/baltimore/news/2012/11/15/kirby-fowler-named-chair-of-maryland.html>.

There is also a separate Racing Commission in Maryland within the Department of Labor, Licensing and Regulation which oversees the pari-mutuel industry. Maryland's gaming structure is depicted below.

Figure 36: Maryland gaming regulatory structure



Source: Maryland state agencies, Spectrum Gaming Group

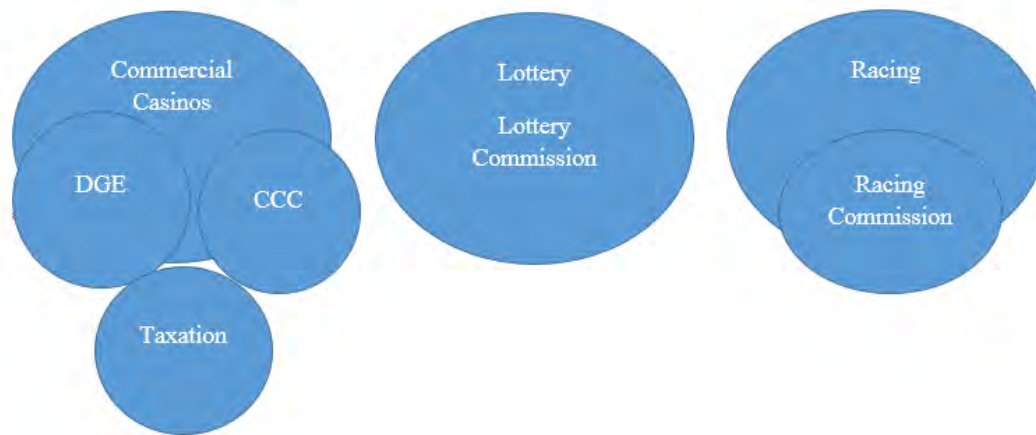
New Jersey

Until recently, the New Jersey Casino Control Commission was the agency responsible for the day-to-day oversight of operations, internal controls, regulations, licensing, financial analysis and auditing. The Division of Gaming Enforcement was responsible for investigations and enforcement. Those responsibilities have shifted and now the Division of Gaming Enforcement has more responsibilities in auditing, licensing and financial analysis. Much of the day-to-day oversight of operations and licensing requirements has been eliminated.³²⁷ The Division of Taxation took responsibility for the collection of several taxes previously collected by the Casino Control Commission, including the gross revenue tax.³²⁸

In New Jersey, the Lottery is regulated by a separate Lottery Commission and Racing is regulated by a separate Racing Commission.

³²⁷ Senate Bill S12 and New Jersey Casino Control Act.

³²⁸ New Jersey Division of Taxation website regarding New Legislation 2011 <http://www.state.nj.us/treasury/taxation/newlegislation2011.shtml> (accessed May 25, 2013).

Figure 37: New Jersey gaming regulatory structure

Source: New Jersey state agencies, Spectrum Gaming Group

Pennsylvania

Pennsylvania's dominant regulatory agency is the Pennsylvania Gaming Control Board ("PGCB"). The state has confronted issues regarding its regulatory structure, as a grand jury investigation and report cited initial structural weaknesses, which are useful for instructional purposes.³²⁹ That grand jury report is dealt with in significant detail later in this report.

Some of the changes that were implemented by the PGCB, such as the creation of an independent reporting line for the Bureau of Investigations and Enforcement ("BIE"), are valuable in illustrating the priorities that should exist for any regulatory agency. Since the grand jury report, there have been changes to the PGCB and the only link between the BIE and the PGCB now is for administrative functions.

Although the Pennsylvania statutes require approval by one of the two racing commissions (Horse or Harness) for a Category 1 (racino) license, as a practical matter the PGCB oversees and takes major responsibility for the regulation of gaming operations at racinos. The PGCB is fully responsible for the non-racino casinos in the state.

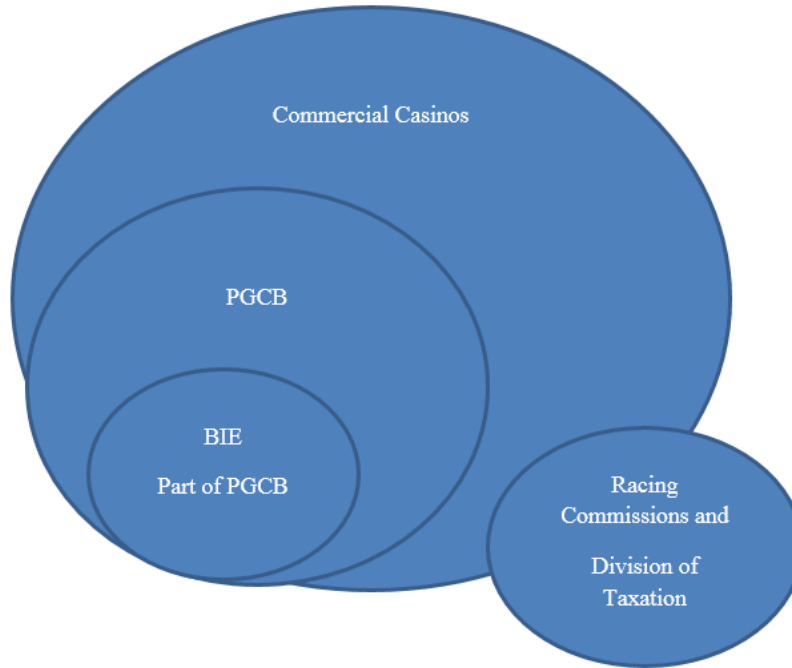
The PGCB is not a law enforcement agency but it works closely with the State Police in its investigations. The Department of Revenue is the trustee for the gaming revenue³³⁰ but the

³²⁹ Donald Gilliland, "Pennsylvania Gaming Control Board riddled with culture of 'noncriminal misconduct,' grand jury report says," *The Patriot-News*, June 12, 2011
http://www.pennlive.com/midstate/index.ssf/2011/06/grand_jury_report_describes_cu.html.

³³⁰ Pennsylvania Statutes Title 4 Chapter 14.

PGCB oversees the internal controls and the day-to-day operations of the casinos. The Pennsylvania model is illustrated below.

Figure 38: Pennsylvania gaming regulatory structure



Source: Pennsylvania state agencies, Spectrum Gaming Group

Kansas

Kansas has a unique organizational structure which involves two primary agencies. The Kansas Lottery technically owns the games in the casinos and the revenue that comes from those games.³³¹ The managers of the casino operations own the facilities and are “paid a fee.”³³² Though this is the legal wording in the Kansas Expanded Lottery Act, for practical purposes there are mainly only subtle differences in the collection of taxes from other states.

The Kansas Lottery, however, is responsible for the gaming revenue and conducts a regular reconciliation. A daily reconciliation through electronic means is done on slot revenue

³³¹ Kansas Expanded Lottery Act, for example New Sec. 3(a) indicates: “The Kansas Lottery may operate one lottery gaming facility in each gaming zone” http://krgc.ks.gov/images/stories/pdf/Statutes_and_Regulations/kansas_expanded_lottery_act.pdf (accessed May 25, 2013).

³³² Ibid., New Sec. 35.

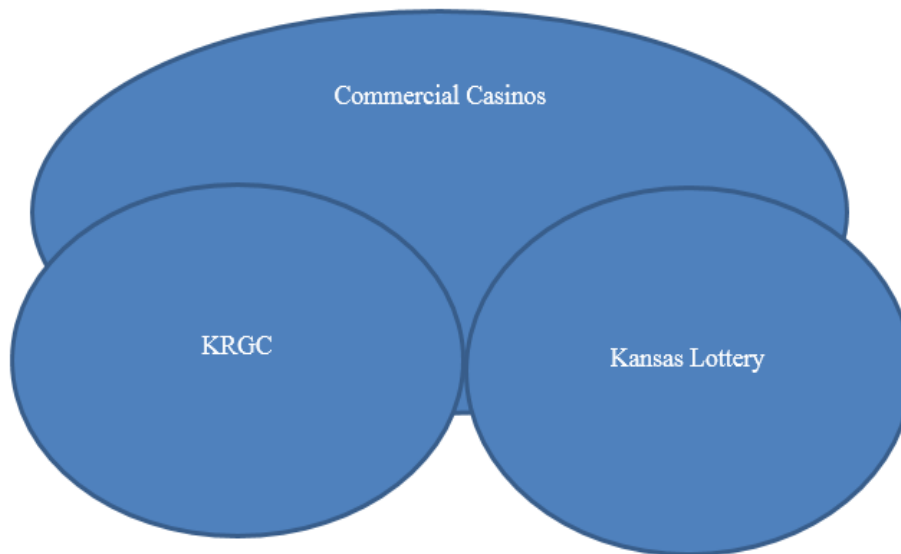
and a monthly reconciliation is done of the table game revenue.³³³ The Kansas Lottery is also responsible for the lottery program in the state.

It is the Kansas Racing and Gaming Commission (“KRGC”) that performs the bulk of the typical regulatory functions over the casinos, including oversight of casino operations, investigations and licensing. The KRGC also performs audits on casino revenue. This is an acknowledged though minor overlap of functions between the two agencies, but this redundancy is not considered a bad thing. According to representatives from both agencies, the system works well and helps to create a needed assurance of integrity.

Pari-mutuel gaming has become inactive in Kansas, without any performances since 2008.³³⁴ Thus the KRGC’s focus is on casino gaming.

The Kansas model is depicted below:

Figure 39: Kansas gaming regulatory structure



Source: Kansas state agencies, Spectrum Gaming Group

Iowa

Iowa has a primary agency that regulates the 18 commercial casinos in the state but other agencies are utilized in more minor roles. The Iowa Racing and Gaming Commission (“IRGC”) performs most typical functions including licensing and the oversight of daily operations. Employees and gaming related companies are licensed. Investigations, however, are primarily

³³³ Ibid.

³³⁴ Interview with representative of the KRGC.

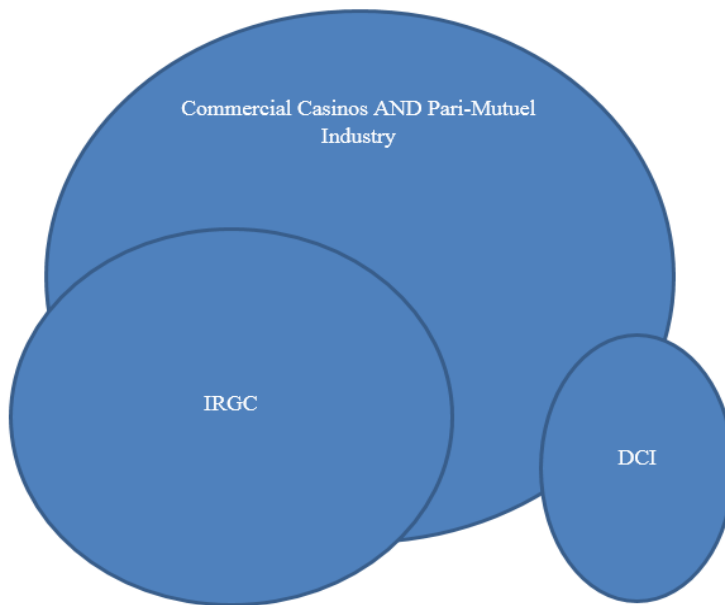
carried out by the Department of Criminal Investigations (“DCI”). The DCI is also present at each casino and play a major role in investigations of criminal activities and enforcement.³³⁵

The Department of Revenue is the trustee for the gaming revenue through the IRGC and takes responsibility for assuring the internal controls are followed and audited.³³⁶

The IRGC is similar to the Florida PMW in that it is also responsible for pari-mutuel wagering in the state. The IRGC is responsible for the presently operating pari-mutuel facilities of one horse track and two dog tracks in the state. Though this agency does have pari-mutuel wagering regulatory responsibilities, there are also considerable differences with the Florida PMW. The Iowa pari-mutuel industry has significantly fewer facilities than Florida and there is no requirement to limit casino gaming in pari-mutuel facilities.

The organization of the agencies involved in Iowa is depicted below:

Figure 40: Iowa gaming regulatory structure



Source: Iowa state agencies, Spectrum Gaming Group

d. Regulatory Oversight Critical Functions

Regulatory agencies that oversee commercial casinos have a number of typical functions. While there are variations in the details as to the depth of regulation and the specifics of procedures, the *types* of functions have become standard in almost all states.

³³⁵ Gathered from Interview with representative of the Iowa Racing and Gaming Commission 5-20-2013.

³³⁶ Ibid.

Some of the most critical of those functions include licensing, ongoing review of daily operations, internal control requirements, and auditing. Each of these is addressed below:

- **Licensing:** All regulatory agencies investigate and make a determination regarding the qualifications of companies and natural persons that apply to operate, work in or service casinos. Some states have more extensive requirements than others. All states require casino operators and companies that supply gaming related equipment or services, such as slot machines, to file for a license. Some states, such as Pennsylvania and Massachusetts, require companies that supply non-gaming goods or services to file for a license under certain conditions (in Pennsylvania a certification, which is similar to a license, is required). In Massachusetts, the MGC may require any vendor regularly conducting over \$250,000 of business with a gaming licensee within a 12-month period, or \$100,000 of business in a three-year period, to be licensed as a gaming vendor.³³⁷ The Pennsylvania Gaming Control Board requires companies that conduct over \$500,000 worth of business to be certified.³³⁸

Without having some mechanism for a regulatory agency to review all contracts with a casino operator, even those that relate to non-gaming companies, the regulatory agency may be unaware of the movement of large amounts of money or the infiltration of organized criminal elements. The need for close examination of non-gaming enterprises, such as construction companies, became evident in New Jersey in the Bayshore Rebar matter, among others.³³⁹

Similarly, almost all states require either licensing or registration of employees who work in the gaming areas. Some states, such as Massachusetts, also require employees who work in non-gaming positions to be registered.³⁴⁰ Spectrum has found that it is good policy to require licensing or registration of such persons because of the potential for such individuals to be involved directly or through collusion in theft or other crimes in a casino operation.

The attention to detail of this process is critical as it is the first step in assuring integrity of the casino industry in that state.

³³⁷ Massachusetts Expanded Gaming Act, Section 31 (d).

³³⁸ Pennsylvania Gaming Control Board <http://gamingcontrolboard.pa.gov/?p=75> (accessed May 29, 2013).

³³⁹ As indicated in the following article, which is a report of the final Bayshore Rebar hearing, the company was denied a license in 1989 and 1997. George Anastasia, "The other Joey Merlino' gets casino service license," *Philadelphia Inquirer*, May 6, 2010 http://articles.philly.com/2010-05-06/news/24958581_1_hearing-examiner-mob-ties-joey-merlino.

³⁴⁰ Massachusetts Expanded Gaming Act, Section 30(c).

- **Ongoing Review of Daily Operations:** Virtually all states also maintain a presence in the casino. The extent of this presence varies from a 24/7 inspector or agent at a publicly visible level, such as exists in Pennsylvania, Massachusetts and Ohio, to a limited law enforcement presence such as what now exists in New Jersey. The inspector or agent presence includes greater scrutiny of ongoing gaming operations and transactions. As happened in New Jersey, such requirements may be stringent in the early years and then relaxed somewhat as both the industry and regulatory system mature.³⁴¹
- **Internal control requirements:** Virtually all states have requirements that require the casino operation to address internal controls within their operations. Internal control requirements may mandate that certain departments, such as surveillance and internal audit, are created. Internal control requirements may also require separation of such duties as income control and table games to prevent incompatible functions.
- **Auditing:** Regulatory agencies have an audit function over the casino operations, though the extent and frequency of such audits may vary. At a minimum, best practices demonstrate that the casino regulatory agency must conduct random unscheduled audits relating to the collection of gaming revenue.
- **Underage gambling and problem gambling:** All jurisdictions are justifiably concerned with the problems associated with underage gambling and problem/compulsive gambling. Statutory schemes attempt to cope with such important public policy concerns. One such endeavor entails the formation of a self-exclusion list whereby self-proclaimed problem gamblers can voluntarily decide to be excluded from gambling activity. Once a person is placed on the self-exclusion list, the casino operator is obligated to take appropriate measures to enforce the exclusion from gaming activity, including a cessation of direct marketing to the individual. With respect to underage gambling, such activity is generally harshly punished, both as to the underage patron and the casino operator.

e. Table of Organization of Regulatory Agencies

Organizations of regulatory agencies are largely divided by the functions detailed above and by functions that allow for these actions, with some additional functions that are needed in most government agencies. In 2010, Spectrum did a review of gaming agencies that address the types of tables of organization. This report will borrow from that earlier research.³⁴²

The following are departments or offices that are typical in casino regulatory agencies:

³⁴¹ Spectrum Gaming Group, "Gaming Regulation: Overview, Primer," prepared for the State of New Hampshire, January 26, 2010 http://www.nh.gov/gsc/calendar/documents/20100216spectrum_regulatory.pdf.

³⁴² Ibid.

- **Investigations.** Casino regulatory agencies have staff devoted to investigations, though as detailed in Subsection C above, investigatory functions are often separated from those functions that decide licensing.
- **Licensing:** The license function often has its own staff because the specific activities of licensing are often most efficiently accomplished by those familiar with applications, the review of investigatory reports and data collection relevant to the process.
- **Operational Review of Casinos:** Casino regulatory agencies often have an inspection or agent staff that is devoted to the operations of casinos. In some cases there is both a law enforcement and civilian presence. A civilian presence in a casino operation can assist in the oversight of internal controls and is less expensive than a law enforcement presence. A law enforcement presence is necessary also for criminal purposes.
- **Internal Controls:** There is typically a group of staff devoted to the review of the casino's internal controls. Typically, especially in jurisdictions that involve larger casinos, the internal control plans of a casino are submitted for review and approval by this group
- **Financial Analysis:** Casino regulatory agencies are responsible for the collection of revenue, thus the analysis of trends in incoming revenue is useful and possibly critical.
- **Auditing:** Auditing of the considerable sums of revenue in a casino industry by the regulatory agency is especially critical. Nearly all agencies employ staff devoted to such functions.
- **Other functions:** Casino regulatory agencies are in great need of services in Information Technology since the management of revenue and license data is an ongoing, regular and challenging process. There is also a need for the accounting for and transfer of funds, as many regulatory agencies are the trustee of funds. There is also a need for typical services such as administration, human resources, and public information dissemination.

Regardless of the regulatory scheme employed, Spectrum has found that regulation is most effective when it provides the following, as noted in the aforementioned 2010 report:³⁴³

- Provides for sufficient regulatory oversight by creating a unit or team that is frequently on the casino floor, accessible to the public and visible to casino employees
- Creates a license structure that addresses all those that participate in the gaming industry, including the casino licensees, the companies that service those licensees and

³⁴³ Ibid., p. 19.

the employees. It is only by examining the background of all those who seek to participate in the industry that integrity can be assured.

- Creates a decision-making structure that allows for independence from the investigatory branch of the regulatory structure. In addition, sufficiently staff the decision-making agency to ensure it has adequate resources to carry out its duties.

f. Full- and Part-Time Decision-Making Authorities

Agencies in all casino gaming states have full-time staff.³⁴⁴ However, as documented in Subsection C above, no two states are the same in the composition of the staff or even in the number of agencies that employ them. There is also a mixed bag regarding the decision making authorities (often called commissions) in each state.

The argument for a full time gaming commission can go back to the time of Abscam at the start of the New Jersey Casino Control Commission (Commission).³⁴⁵ At that time the Commission was part-time (except for the Chairman who was full-time). After Abscam, the law in New Jersey was changed to require full time commissioners. A full time commissioner, which is allowed no other occupation, is likely to be more focused on their positions. The tradeoff may be that full time commissioners should be paid a full time salary.

Two of the most recently formed commissions, the Ohio Casino Control Commission and the Massachusetts Gaming Commission, went in different directions when they formed their agencies.³⁴⁶ As is also documented in the aforementioned Spectrum report of 2010, there is no specific trend on this issue.³⁴⁷ The appropriate answer for a state forming a new gaming commission would depend in the size and complexity of the gaming industry. Surely the larger gaming industries would require more license making decisions and a full-time position may be more appropriate.

³⁴⁴ In addition to the information in this report also see *Ibid.*, p. 17.

³⁴⁵ The following is an article provides a summary of the Abscam sting:
<http://socyberty.com/government/abscam-operation/> (accessed May 29, 2013).

³⁴⁶ Ohio's Commission is part time, see 3772.02. Massachusetts' commissioners are full-time, see the Massachusetts Expanded Gaming Act, Section 3.

³⁴⁷ Spectrum New Hampshire report, p 17.

3. Application Forms

a. Form of Application and Background Investigations

The basic application form that is used by many casino regulatory agencies for natural persons is the multi-jurisdictional personal history disclosure form.³⁴⁸ This form is often supplemented with an additional form that is designed to take into account a state's specific requirements. The multi-jurisdictional form requires disclosure of information on family background, offices and positions, employment and licensing data, testimony before a license agency, company ownership information, civil and criminal arrest history, financial data, and a net worth statement.

Gaming agencies also often require a Business Entity Disclosure Form³⁴⁹ which typically requires information about the business, the directors and trustees, officers, voting owners, compensation, contracts, transactions, testimony, violations, bankruptcy proceedings and licenses,

Other forms are often used by casino regulatory agencies for other types of applications including for employees in lower level positions and companies that are not gaming related. Pari-mutuel agencies commonly use a smaller form than the multi-jurisdictional form.

It is a universally accepted practice for casino gaming regulatory agencies to conduct background investigations, either by its internal staff or by retaining the services of a third-party investigative firm, to evaluate an applicant's suitability for licensure. The licensing process for authorization to operate a casino facility or to be employed in a gambling establishment, commences with the filing of a license application by the applicant, to be followed by the requisite suitability background investigation.

The costs of the investigation are usually paid by the applicant. An application for a casino license will necessarily include individual applications filed by the company's owners, managers, officers, directors, parent companies and shareholders owning at least 5 percent of the company's equity securities.

b. Confidentiality of Information

When crafting a specific license application that requires certain background information to be provided by the applicant, in advance of the requisite suitability background investigation, an important consideration for any regulatory agency involves a determination of whether material provided in an application is to be treated as confidential or whether it would be made

³⁴⁸ The multi-jurisdictional form is available on the web on several locations, such as at: <http://iagr.org/wp-content/uploads/Multi-Jurisdictional-Application.pdf>.

³⁴⁹ An example are the Massachusetts forms listed on this website: <http://massgaming.com/licensing-regulations/applications/>.

available upon request to the public. Generally, most gaming jurisdictions consider personal information contained in an application, especially financial data, to be confidential. Some jurisdictions, most notably Ohio and Massachusetts, which have broad right-to-know laws, have narrowly drawn rules governing confidentiality of material received. By contrast, New Jersey affords broad confidentiality protections for information submitted as part of the application process. The procedures that govern confidentiality usually coincide with the particular state's rules for public access to government agency documents.

4. Enforcement Proceedings

Casino regulatory agencies are empowered to oversee all aspects of the licensed entity's gaming operations. This regulatory oversight includes periodic on-site inspections, investigations of suspected wrongdoing, examination of internal control procedures to ensure compliance, and the imposition of disciplinary action for violations of applicable regulatory requirements. Sanctions vary from stern warning letters to the imposition of fines, to suspension of licenses for a finite term, and in the most egregious cases, to the revocation of licenses. Depending on the gravity of the accusation, there may be a disciplinary adjudicatory hearing to resolve the matter.

It is noteworthy that a gaming license is considered to be a revocable privilege, rather than a right of entitlement. Common violations applicable to the operating entity include the following:

- Impermissibly permitting underage gambling
- Failing to properly exclude a person who is on the agency's exclusion list
- Failing to adhere to internal control procedures governing the operations of the games and the movement of money
- Failing to notify the regulators about operational or organizational changes
- Failing to detect criminal conduct or to take appropriate action when learning of criminal activity on the casino premises
- Failing to provide adequate surveillance or security for casino operations.

a. Enforcement of Illegal Gambling

We spoke to officials in Florida, Iowa, Kansas, Maryland, Massachusetts, New Jersey and Pennsylvania and found that the investigation of illegal gambling is handled by law enforcement officers (as opposed to regulators). Whether the state gaming regulatory agency regulates illegal gambling or not depends primarily on whether they are authorized to do so based on whether they have law enforcement authority, in most cases. Even when the state gaming regulatory agency has such authority, the actual prosecution of such matters is normally referred to the county or local prosecuting authority.

Ohio is one such example. The Ohio Casino Control Commission has authority under the casino control act³⁵⁰ to levy and collect penalties for some noncriminal violations. Criminal violations are referred to the Attorney General's office or local prosecuting office. As a practical matter the casino control act is a fairly new law and the actual prosecution of criminal matters depends on the circumstances. Internet cafes have been of major concern in Ohio. The addressing of the legality of these cafes has been taken up by the General Assembly,³⁵¹ however we were informed that there was recently a further complication: Some Internet cafes, in addition to using the normal internet machines in the cafes, were employing the equivalent of slot machines. The Attorney General's office and the Ohio Casino Control Commission staff cooperated in the matter – which we found to be a common theme among states. Illegal gambling often comes in forms that are not completely anticipated. In this case, the Casino Control Commission staff was used to help determine the nature of the machines and whether they met the definition of slot machines.³⁵² There are law enforcement agents with the Casino Commission, but prosecution for criminal illegal gambling would come from other state offices. Internet cafes are a subject unto themselves.³⁵³

In Massachusetts the State Police handle illegal gambling investigations, but it is important to note that the Massachusetts Gaming Commission has a State Police unit assigned to it. Either the Gaming Commission unit of the State Police or another branch of the State takes responsibility for the matter, dependent on the nature of the type of illegal gambling.

New Jersey's model is somewhat different. There are two primary agencies in New Jersey: the Casino Control Commission and the Division of Gaming Enforcement. Gaming Enforcement is the prosecutorial arm for civil matters, and also has State Police assigned to it, under the purview of the Attorney General's Office. The State Police in Gaming Enforcement would be involved in investigating illegal gambling.

In Pennsylvania, the Gaming Control Board has no authority over illegal gambling. The State Police would take the lead on those matters and likely would work with local law enforcement and prosecuting authorities, depending on the nature of the illegal gambling.

In Maryland the Lottery and Gaming Control Agency has no authority over illegal gaming. Matters are turned over to the State's Attorneys. In Iowa, illegal gaming matters are not

³⁵⁰ The Ohio Casino Control Act, 3772. 99 (e) (12).

³⁵¹ See for example this article addressing the matter <http://www.wkbn.com/2013/06/04/ohio-governor-signs-internet-cafe-crackdown/>.

³⁵² See this article on the involvement of different offices: <http://www.ohioattorneygeneral.gov/Media/News-Releases/June-2013/Search-Warrants-Served-at-Illegal-Casino-Locations>.

³⁵³ American Gaming Association <http://www.americangaming.org/government-affairs/priority-issues/internet-sweepstakes-cafes>.

addressed by the Iowa and Racing Commission. Instead such matters are turned over to the Division of Criminal Investigation.

In Kansas, however, the Racing and Gaming Commission does take the lead on such matters. There are enforcement agents at the Racing and Gaming Commission that can make arrests on such issues. Prosecution, as is the case in many states, rests with the local prosecutors. Also in Kansas, controversy and court challenges surrounding “gray machines” further complicate matters.³⁵⁴

In Florida, the Department of Law Enforcement advised us that local or county law enforcement and prosecutors are assigned such matters. The Division of Pari-Mutuel Wagering does not have authority over illegal gaming, though as in other states it may obtain information on such matters. If such information is obtained, the Division of Pari-Mutuel Wagering would work with local officials and follow up as needed, though they would act more in an information sharing role than investigatory.

5. Costs: How Regulators are Addressing Expansion of Gaming

The regulatory model that has been accepted in many jurisdictions is that the cost of investigations should be paid for by applicants. As Spectrum noted in its 2010 report for the State of New Hampshire, “A subcomponent of this category is that those companies and individuals applying for a casino or vendor license should be required to pay for all costs associated with the conduct of their background investigations. This requirement allows the regulatory agency to undertake what are often complex and multi-faceted entity and other investigations without having the taxpayers of the state pay for these types of investigations.”³⁵⁵

6. Gaining an Expertise in Casino Gaming

The regulation of casino gambling is unique from other types of business activity because of the speed of the transactions, the amount of money that changes hands and the way in which transactions are completed. Unlike any other type of business money changes hands in some cases with no documentation. For example at table games the allocation of chips by the dealer to the customer after the playing of a hand, (or the throwing of dice, or the spinning of a wheel, etc.) permits no documentation.

The types of transactions at slot machines are comparable in some respects to transactions in other businesses but it too is challenging in a regulatory sense. There can be multiple transactions over short periods between a machine and a patron involving what might be

³⁵⁴ See this article summarizing the gray machine issue: http://cjonline.com/news/local/2010-10-25/gray_machine_clarity_sought. Also the state Supreme Court ruling: <http://www.kscourts.org/cases-and-opinions/opinions/SupCt/2011/20110408/102786.pdf>.

³⁵⁵ Spectrum New Hampshire report, p. 4.

a great deal of money. Jackpots worth seven figures can originate from the risking of a very small amount from the patron.

Because of the nature of the business there are unique types of crimes that will be attempted in the gaming industry. Criminals can be attracted simply because of the large amounts of money involved, but there are also ample unique ways to commit crimes in casinos. Two examples, of many, are card cheats at table games and attempts at altering the computer chips in the slot machines.

The regulatory structure that a state adopts, and all the functions involved in that structure, including investigations, audits, licensing, etc., are all ultimately designed with one purpose in mind: to create an appropriate gaming and business activity and to minimize any criminal activity. The states' collection of gaming revenue depends on the fulfillment of this purpose, but just as important is the public's perception of the integrity and fairness of the gaming industry.

While gaining an expertise in the types of transactions in casino gaming is critical to regulation of the gaming industry, so too is gaining an expertise in the types of investigations necessary in the examination of applicants for casino operators and the transparency of the licensing process. Casino gaming operators are sometimes parts of multinational companies. The awarding of a license to operate a casino can be lucrative for a company. Thus the investigation, the consideration of the investigatory findings by the licensing authority and the awarding of the license are regulatory matters that must be addressed with thorough understanding and considerable deliberation.

While it may be argued that there are many advantages and disadvantages to expanding gaming, we believe there is no valid argument for the expansion of gaming without taking the proper regulatory measures. While a strong regulatory structure may be expensive to implement, this expense is typically borne by the gaming industry and not taxpayers.³⁵⁶ On the other hand, a weak or flawed regulatory system will invite nefarious and criminal activity, will fail to assure integrity of operations, and will not maintain the public trust and confidence in the regulatory system. Weak or flawed regulations is neither a model which is acceptable to the state nor a model which is an acceptable business practice to the casino industry that is regulated.

7. Other Critical Factors in the Regulatory Structure

There are advantages to creating a consolidated gaming agency, such as the maximum use of resources and the prioritization of functions. The danger in a consolidated agency is illustrated in the early Pennsylvania model. As explained in the grand jury findings, there was a bias created in the agency toward the awarding of licenses and the minimizing of investigative

³⁵⁶ The norm in the regulation of casino gaming is to require the payment for investigations and other regulatory functions through fees and billings paid by casino applicants and operators.

findings that could delay such licenses. The present Pennsylvania model incorporates a more independent reporting line for the investigative functions.

Spectrum has found there can be advantages in separate agencies which have some built-in and intentional overlap of functions. In the Kansas model, for example, there is little if any expense in any overlapping functions, but there is a greater assurance of integrity in having more than one agency involved in the oversight of the state's revenue. Of course, any overlap should be clearly defined and be designed to complement the functions of each agency.

8. Conclusion

Regulatory structures are almost impossible to place into a few models, as each state has unique features relating to its gaming industry. Spectrum believes that a consolidated regulatory agency or a group of agencies which share responsibility can both complete their functions in a competent manner. However there are a number of important considerations. There are a number of themes of regulation which almost always shine through regardless of the state, the gaming venues, or the number of casinos or where they are located in the state. These are not themes of a consolidated model of all regulatory issues or a model that is divided between numerous agencies. The themes of regulatory models over casino gaming have to do with the types of regulation that casino gaming demands.

Trends and Best Practices in Governance and Regulation

A general description of trends and best practices in governance and regulation of gambling activities.

“Effective regulation” can be defined as regulation that advances a variety of public policies while protecting the overall public interest. While the entire scope of policies to be advanced will – and arguably should – vary from jurisdiction to jurisdiction, certain goals would be considered universal. Such goals would include:

- Promoting public confidence in gaming as both a leisure activity for the public, and as an investment opportunity that would generate interest from casino operators seeking an attractive return on invested capital.
- Fostering public confidence and trust in the integrity of the regulatory process and gaming operations
- Ensuring that individuals and business entities involved in gaming meet universally accepted standards of good character, honesty and integrity.
- Ensuring the prohibition of unsuitable persons and entities from participating in the gaming industry.

- Developing, overseeing and monitoring programs to address problem gambling, including reviewing responsible-gaming policies and practices, while maintaining and enforcing exclusion lists, including self-exclusion.
- Addressing other critical public policy concerns, such as underage gambling, or casino-related demands on law enforcement and other public services.
- Optimizing financial benefit to the jurisdiction from multiple revenue streams, including gaming taxes, employment taxes and tax revenue generated from other sources, such as expanded tourism and purchases of goods and services.
- Maintaining flexibility in writing the rules that govern gaming to make sure that regulators are able to adapt to changes in technology and to revise and reform regulations as circumstances change, and as regulators become more familiar and comfortable with evolving industry practices.

Individual states, as they develop and customize their own statutory and regulatory governing structures, can layer on additional goals that are specific to their own economic, political, demographic and competitive landscapes. Such ancillary goals can vary, but often include the following:

- Promoting tourism
- Reviving or improving urban areas
- Creating employment opportunities
- Enhancing the conventions and meetings business
- Creating opportunities for other businesses within the jurisdiction
- Attracting additional capital investment

Establishing such goals is relatively straightforward. Achieving them is often difficult for the following reasons:

- Once a license is issued, the power of regulators and lawmakers to effect change diminishes.
- Sometimes, goals can conflict with each other. For example, a goal of maximizing license fees can conflict with a goal of maximizing capital investment.
- The market does not always cooperate.

Still, jurisdictions that have the ability to establish a competitive bidding process would, with all else being equal, be more likely to achieve goals, since applicants for licensure have more incentive to establish ambitious plans to achieve goals.

We have witnessed that in various states with competitive processes, including Pennsylvania and Massachusetts. At this writing, Massachusetts is pursuing a competitive

bidding process, and various applicants have made it clear that they are developing robust policies to achieve goals that range from promoting tourism to training existing Massachusetts adults for the jobs that will be created.

Absent a competitive bidding process, gaming tends to evolve either as a system in which pari-mutuel facilities are grandfathered in, sometimes with requirements for significant capital investment, or with no statutory limit on the number of licenses in specific geographic regions such as the Gulf Coast of Mississippi, Las Vegas or Atlantic City.

Whether a licensing process is competitive or not, however, the ability of regulators to take action after a license is issued diminishes quickly and dramatically. Absent specific violations that would warrant fines or either the revocation or non-renewal of a license, regulators have a limited ability to prod operating licensees in specific policy directions. The larger goal then in the effective regulation of gaming is to align the goals of the public and private sectors.

Some of these goals noted above may seem to be contradictory. For example, a single licensing jurisdiction would be tasked with developing a positive investment climate while addressing serious policy issues, such as crime and problem gambling. Such seeming contradictions can be best addressed by adhering to what economists refer to as “goal congruence,” a system in which the interests of all stakeholders are parallel.

Such a system is quite achievable in gaming, but is by no means assured in all instances. For example, both the state and the casino operator have a stake in realizing an attractive return on investment. The state receives tax revenue, among other benefits, while investors are rewarded for the risks they have undertaken. Similarly, both the public and private sectors have an abiding interest in promoting public confidence, and in maintaining high standards for integrity. Operators, who are often licensed in multiple jurisdictions, would not want to risk their gaming license in *any* jurisdiction as that would put their licensure at risk in *every* jurisdiction.

Where goals are not congruent, legislators and regulators would have an obligation to ensure that the public’s goals are dominant. If handled effectively, such situations can turn disparate interests into parallel goals. The most illustrative example of this phenomenon can be traced back to 1982, when a bank clerk from Toronto, Brian Molony, was regularly embezzling funds from his employer and gambling with those dollars at Caesars in Atlantic City.

The Molony case – which was widely publicized and became the subject of both a 2002 book, *Stung: The Incredible Obsession of Brian Molony*, by Gary Ross, and a 2003 movie that was inspired by the events but changed the name of the chief subject, *Owning Mahowny* – was viewed by many, including regulators, as a story of greed run amok. Gaming operators were willing to bend rules and not ask questions about a bank clerk clearly gambling over his head, and without paying any heed to issues ranging from the potential of pathological gambling to the issue of gambling with stolen funds.

The New Jersey Division of Gaming Enforcement, the prosecutorial arm of the dual-agency regulatory structure in the state, negotiated a settlement with Caesars for various violations of regulations in the Molony matter, with the casino being required to close its doors – while still paying its staff – on the traditionally busy Friday following Thanksgiving, on November 30, 1985.³⁵⁷ The matter was summarized in *The New York Times* following a decision by the quasi-judicial agency of the state to approve the settlement:

The Casino Control Commission today ordered Caesars to close its Atlantic City casino for a day as a penalty for violating credit, deposit and reporting regulations to cater to a heavy gambler. The closing, the first ordered by the commission, could cost Caesars nearly \$1 million in lost revenues. Thomas R. O'Brien, director of the New Jersey Division of Gaming Enforcement, said it was the harshest penalty to be imposed in the seven-year history of the Atlantic City gaming industry.³⁵⁸

Nearly 30 years later, that penalty of shutting the casino down for a busy day remains as one of the harshest penalties imposed by regulators in that state (short of an outright license denial), and we are unaware of a similarly harsh penalty imposed in any other gaming jurisdiction.

Six months after that unprecedented closing, Caesars reached a settlement with Canadian bankers, who were the victims of Molony's crimes. That settlement prompted the following summary in the *Philadelphia Inquirer*:

Molony was arrested April 27, 1982, a day after he lost \$1 million gambling at Caesars. He got the gambling money by writing loans in the names of both real and fictitious companies.

In court papers filed in Canada, Caesars said it never asked Molony for credit information and had never asked what he did for a living. The papers said Caesars supplied Molony with tens of thousands of dollars in hotel rooms and airfare by private Lear jet.

Although he plunked down thousands at the gaming tables, Molony led a modest lifestyle in Toronto, where he wore inexpensive, ill-fitting clothes and left carefully calculated 7 percent tips in restaurants.

Court documents also show that Molony was able to transfer millions of dollars out of the Imperial Bank of Commerce through a company called California Clearing Corp., a wholly owned subsidiary of Desert Palace, a Las Vegas casino. The corporation's only purpose, according to records, was to let people deposit sums of money into a casino without detection.

³⁵⁷ Present-day Spectrum Gaming Group Managing Director Fredric Gushin, then New Jersey Assistant Attorney General and Deputy Director of the Division of Gaming Enforcement, participated in the settlement negotiations with Caesars.

³⁵⁸ Donald Janson, "Caesars Ordered To Close For Day For Violation Of Gambling Rules," *New York Times*, October 10, 1985 <http://www.nytimes.com/1985/10/10/nyregion/caesars-ordered-to-close-for-day-for-violations-of-gambling-rules.html?n=Top%2fReference%2fTimes%20Topics%2fSubjects%2fG%2fGambling>.

As a result of Molony's activities at the casino, Caesars was forced to close for the day Nov. 30, the (Friday) after Thanksgiving, as a disciplinary measure for gambling-law violations. The closing was part of an agreement worked out between Caesars and the state Division of Gaming Enforcement.

The Casino Control Commission approved the agreement and \$36,500 in fines against six Caesar's employees.

Industry analysts estimated that the casino stood to lose between \$700,000 and \$800,000 because of the shutdown.³⁵⁹

The Molony case offers the highest profile, but was hardly alone, as an example of casinos having goals that were not parallel with the goals of the state in which they operated. In Atlantic City alone, the record includes numerous matters in which casinos ignored policies ranging from preventing underage gambling to minimizing problem gambling. Notably, such violations have declined in recent years. While it may very well be that regulatory oversight has diminished, thus leading to fewer violations being revealed, our experience suggests that much of the decline in violations can be attributed to goal congruence: Casinos are increasingly adapting their policies to be more fully aligned with the goals of the states in which they operate.

1. Best Practices and the Political Process

The term “effective” is not synonymous with strict, but it should be synonymous with “understandable,” “comprehensive,” and “defensible.” In other words, every rule to be found in gaming statutes, regulations or policies should have a clear and legitimate purpose that can be readily communicated and understood. Indeed, while the perception of “strictness” will vary, depending on the vantage point, “strictness” is a relative term.

Typically, gaming regulation starts out strict and then allows for reforms as circumstances change, and as regulators become more comfortable with the processes involved in the governance of gaming. To move in the opposite direction – moving from a relatively relaxed regulatory regimen to a more restrictive one – would be difficult to implement practically and politically. In large measure, the inherent difficulty in moving toward a more strict regulatory system if one is needed can be attributed to the relationship between gaming and politics. By its nature, gaming is inextricably intertwined with the political process – a reiteration of one of this report’s core themes. Gaming’s very existence – as well as its ability to generate profits – depends on its ability to be in the good graces of elected and appointed officials, and to remain there.

³⁵⁹ Jane M. Von Bergen, “Caesars Reaches Accord with Bank In Molony Case,” *Philadelphia Inquirer*, May 15, 1986 http://articles.philly.com/1986-05-15/news/26048451_1_gaming-tables-gaming-enforcement-caesars-officials.

In understanding and in governing the relationship between the gaming industry and politics, certain trends and observations should be considered, based on our experience in other markets:

- The ability of elected and appointed officials to shape and guide the policies that govern gaming, and that are designed to marshal the economic and social benefits of gaming, are at their zenith prior to the issuance of gaming licenses.
- To whatever extent is reasonable and appropriate, steps should be taken to insulate gaming from politics, and to limit the ability of the gaming industry to directly influence the political process.
- Over time, regulators and the regulated are likely to grow closer to each other. Left unchecked, a real risk exists that regulators can become cheerleaders for the industry they govern.

Much of this can be described as common sense, and as recognition of reality. While public confidence in gaming demands that controls be put in place to restrict the ability of the industry to influence the political process, such controls are clearly limited, and gaming can never be fully insulated from politics, or vice versa.

Starting with New Jersey's enactment of the Casino Control Act in 1977, certain steps have been identified that establish some level of insulation. These include:

- Limiting, or eliminating, the ability of gaming licensees and their key employees and qualifiers³⁶⁰ from making political contributions at the state and/or local levels.
- Appointing regulators to fixed terms that are not tied to the terms of the elected officials who make such appointments.
- Establishing guidelines for regulators that limit their ability to participate in the political process.
- Limiting the ability of regulators to secure outside income.
- Establishing strict post-employment restrictions for regulators and top staff that limit their ability to work for the industry they govern once they leave public employment.

The presence of any or all of such policies can help establish and maintain public confidence and provide some level of independence for regulators, but true independence is clearly chimerical in established gaming jurisdictions.

While we can identify benefits for the public and private sectors to share common goals, the shared goal of a successful gaming industry can turn regulators into cheerleaders. This risk

³⁶⁰ "Qualifier" is a widely used term in gaming regulation that refers to individuals with the ability to influence a licensee's policies, such as owners, officers and directors. Typically, an entity cannot secure a gaming license unless all of its qualifiers are deemed to be licensable as well.

was identified quite early in modern gaming regulation by the late Martin Danziger, one of the first appointed full-time members of the New Jersey Casino Control Commission. In an interview conducted in 1982,³⁶¹ Danziger observed a number of industries that had been regulated in the 1970s, from securities to air transportation, and suggested that it is quite risky – and that public policy might suffer as a result – if regulators get to the point where they are willing to overlook transgressions or endorse shortcuts as a means of advancing success.

In 1987, Spectrum Managing Director Michael Pollock wrote: “The problem, it should be noted, is not confined to the regulation of casinos. In the October 15, 1982 issue of *The New Yorker*, Daniel Ford wrote ... ‘Thus, the agency was to play the incompatible roles of coach and umpire, of partisan and judge – was supposed somehow to be both the champion and the disciplinarian of the industry. This dual mandate led to a continuing, unacknowledged conflict within the agency.’ Ford was not writing about the New Jersey Casino Control Commission. He was writing about the Atomic Energy Commission in the 1950s.”³⁶²

The problem of balancing dual roles remains, and is arguably a permanent concern that will require a permanent balancing act. In gaming, the issue of dual mandates specifically translates into a risk of sending a message to licensees that revenue maximization is a primary goal, often at the expense of such other policies as addressing problem gambling, or of maintaining standards of character, honesty and integrity.

This risk is exacerbated and enhanced by another very real phenomenon in gaming regulation: Once a casino is licensed and operating, the ability of regulators to change its course or, in the most extreme instance, remove its operating license is dramatically diminished. An operating casino is employing hundreds or, in many instances, thousands of employees and generating significant revenues for the state. This means that, on the very day it opens, a casino gains political stature, while the political will of regulators to enforce the rules declines.

This phenomenon is not uniform across states, and states have taken steps to address it. In states in which the number of licenses is not fixed – such as New Jersey, Mississippi or Nevada (which were the three earliest adopters of commercial gaming in the United States) – the risk is less severe, as other gaming properties can open, or expand, to address any unmet market demand and increase employment.

New Jersey law allows for “interim casino authorization” (“ICA”) in which an entity can purchase a casino prior to a full investigation and determination of suitability, based on the approval of regulators, by appointing a trustee entrusted with the preservation of the assets of the gaming operator. Such trustees – often retired judges, former casino gaming regulators, or other

³⁶¹ Interview was conducted by Michael Pollock, researching his book, *Hostage to Fortune: Atlantic City and Casino Gambling*, 1987. That portion of the interview was not directly cited in the book but is relevant for purposes of this analysis.

³⁶² *Hostage to Fortune*, p. 196.

individuals who have the clear appearance of independence and integrity – have no responsibilities or role in the operation of the casino whatsoever, unless the New Jersey Casino Control Commission determines that the operator is not suitable for licensure.

At that point, a conservator is appointed, again usually a retired judge or government official, who assumes full control of the operation, including managing the property, with the goal of preparing the casino for sale to a third party. In the aforementioned case involving the license denial of the Tropicana, the trustee of the ICA was appointed to be the conservator. The conservator has a fiduciary responsibility to obtain the highest and best price for the property, although the original owner – the entity deemed not suitable for licensure – cannot be allowed to profit from such a sale. Any money paid for the property over and above the level of original investment goes to the state.

That process is far superior to one in which the state has limited abilities to fully distance an unsuitable owner from the operation. However, experience has shown that the concept of conservatorship can be less than perfect in practice.

A rare use of the conservatorship provision occurred in New Jersey in 2009, when the Commission determined that the new owner of the Tropicana was not fit for licensure. A pre-approved conservator immediately took control of the property with the intent of readying it for sale, as required by the ICA regulations. The conservator, however, raised questions and criticism by the fees he charged for his services. As the *Associated Press* reported at the time:

As many gamblers know, things can get expensive in a hurry in Atlantic City.

The latest proof is the Tropicana Casino and Resort, where the 20-month effort to sell the business has racked up nearly \$7.7 million in legal and consulting fees, with still more to come.

On Wednesday, the state Casino Control Commission will consider additional bills totaling nearly \$50,000.

Those fees, some billed at \$970 an hour, are paid by the casino. They represent more than nine full days' winnings for the Tropicana, which is struggling to regain market share while threatening to lay off employees because of economic pressures.

The Tropicana was sold last month for \$200 million to a group of investors led by billionaire Carl Icahn; the deal could close by year's end. When the casino-hotel first went on the market over a year and a half ago, it was expected to fetch about \$1 billion.

The mounting fees have prompted casino regulators and state lawmakers to consider limiting the time and cost of similar efforts in the future. And with several distressed casinos struggling to survive, one or more additional gambling houses could find themselves going the way of the Tropicana.³⁶³

³⁶³ Wayne Parry, "\$7.6 Million Later, Tropicana Casino Fees Still Rolling in," *Associated Press*, July 15, 2009 <http://www.law.com/jsp/article.jsp?id=1202432256844&pos=atagance&slreturn=20130409215343>.

The lesson here is that the best designed and crafted laws and regulations can still fail to meet expectations in practice. Perfection in gaming regulation will remain elusive, and no regulatory agency is immune from negative publicity, a decline in public confidence or, at worst, a scandal. The New Jersey Casino Control Commission endured a severe scandal of national proportions in its earliest years, when one of its first appointees was embroiled in the Abscam scandal, in which FBI agents established an elaborate scheme – including a phony Arab “sheik” – in a corruption investigation that snared a US senator, six members of Congress, several state and local officials and a gaming regulator.³⁶⁴

The most immediate result of that scandal was a decision by then-Gov. Brendan Byrne of New Jersey to dismiss the four part-time commissioners (including the indicted commissioner) and replace them with four full-time commissioners who joined the full-time chair, who had survived the scandal.³⁶⁵ That move proved to be an important means of saving – and ultimately restoring – public confidence and trust in the regulatory process.

As noted in the previous section, the Pennsylvania Gaming Control Board endured a scathing State Grand Jury report in 2011.³⁶⁶ Spectrum, which had been a consultant to the board, held a critical vantage point in observing that agency in action. The essence of that report, and its implications, were summarized in a column in the *Patriot-News* of Harrisburg:

A recent grand jury investigation into the creation and early decisions of the state’s Gaming Control Board ... details a culture of ‘noncriminal misconduct’ in which officials not only turned a blind eye to potentially criminal activity, but commanded investigators to do the same.

When they didn’t, administrators ‘scrubbed’ the negative information out of official reports before handing them to the board, the grand jury report states. The grand jury suggests the game was fixed before the gambling law was passed.

According to the 102-page report, ‘Even prior to the passage of the act, legislators began considering candidates’ to sit on the powerful board. ...

The grand jury’s report vividly illustrates how the public’s interest took a backseat to political considerations. ...

There was the sense inside the agency that every legislator was pushing to have someone hired. Lists of applicants, with the names of their sponsoring legislators, were compiled and passed around.

³⁶⁴ “The FBI Stings Congress,” *Time*, February 28, 1980
<http://www.time.com/time/magazine/printout/0,8816,921807,00.html> .

³⁶⁵ Martin Waldron, “A long and winding road to casino reform in NJ,” *New York Times*, April 27, 1980
<http://travel2.nytimes.com/top/reference/timestopics/subjects/g/gambling/index.ctx?offset=180&field=des&match=exact&query=POLITICS%20AND%20GOVERNMENT&>.

³⁶⁶ Pennsylvania grand jury report: <http://enews.attorneygeneral.gov/uploads/Gaming-Control-Board-Grand-Jury-Report.pdf>.

One Gaming Control Board administrator testified that ‘more times than not,’ these political favorites ‘fell on their face during the interview.’ But if they didn’t, they were given preference over qualified people who didn’t have a patron in the Legislature.

According to the grand jury, the hiring by patronage resulted in an inept administrative staff, lacking the qualifications to supervise a multibillion-dollar industry.³⁶⁷

The history of scandal and controversy in gaming regulation shows that agencies can survive, sometimes following dramatic steps, and sometimes simply by appointing new people over time who fully understand the delicate relationship between maintaining public confidence and advancing public policy.

Gaming, and its regulatory oversight, has been guided by certain principles and realities that we have observed in our work over the past several decades. In 2008, Spectrum wrote the following in a report for the Commonwealth of Massachusetts:

Our experience over the past decades has led us to develop certain cautionary notes to help ensure that expectations are realistic. While no two gaming markets can be precisely alike, there are some commonalities, including:

- Gaming should never be viewed as a panacea to cure social ills or solve fiscal problems. It is a tool that, if effectively managed, can generate capital investment, employment and visitation that in turn would provide resources that can help address a variety of other issues.
- Casinos, by themselves, cannot turn unattractive or unappealing neighborhoods or communities into attractive magnets. To effect such a potential change often requires significant amounts of planning, financial capital and political capital.
- Casinos, by themselves, cannot turn former industrial areas or other non-tourist sites into tourist attractions. That requires a concomitant investment in developing a necessary tourism infrastructure.
- Neither the challenges nor the opportunities created by a casino industry stop at municipal or even state boundaries.
- The heart of the competitive bidding process will be the establishment of guidelines that delineate the criteria for evaluating bids. (The state) needs to be as expansive and comprehensive as possible in its guidelines.

In our experience in various markets, including as participants and close observers in the 30-year history of casino regulation in New Jersey, we note the following:

- A regulatory system should start out strictly, and then be modified as circumstances change, and as the regulators become more comfortable and

³⁶⁷ Donald Gilliland “Pennsylvania Gaming Control Board riddled with culture of ‘noncriminal misconduct,’ grand jury report says,” *The Patriot-News*, June 12, 2011.

http://www.pennlive.com/midstate/index.ssf/2011/06/grand_jury_report_describes_cu.html.

gain confidence that the process is moving in the right direction. In most cases, political and economic realities will be quickly established, making it difficult to move in the opposite direction, toward a system of stricter regulation and tighter controls. This would be particularly true in this instance, where the legislation contemplates a competitive bidding process. In such instances, the most important rules are the ones established at the outset to determine the successful bidders. Once those criteria have been established and a successful bidder has been named, the system would not allow lawmakers or regulators to go back and alter those initial criteria.

- (Once) a casino is established and is generating tax revenue, employing people and attracting visitors, it cannot be easily undone in any practical sense.
- The public sector ... has broad discretion and powerful leverage at the outset to ensure that the successful bidder takes whatever steps are necessary to advance the public interest on a wide variety of fronts. Such leverage would be at its zenith during the pre-licensing phase, in which applicants would recognize that they must compete against each other in their zeal and in their creativity in developing strategies to advance the public interest. Once licenses are issued, and casinos are operational, we caution that such leverage would largely disappear.
- Using that leverage to require that all bidders submit comprehensive, credible plans that are in congruence with public policies can be justified by the proposed legislation, which essentially creates ... regional monopolies. No other private businesses that targets consumer discretionary spending, from hotels to restaurants, could reasonably expect that (the state) would protect them from potential in-state competition. We suggest that such protection requires a corresponding commitment to ensure that marketing, human resources and other policies put forth are designed to promote the public interest.³⁶⁸

2. Conclusion

The modern history of efforts to establish effective gaming regulation – beginning with the adoption of the New Jersey Casino Control Act in 1977 – parallels the interest of Wall Street in gaming as an investment opportunity. In our experience, that is no coincidence. An absence of effective, stable regulation adds risk to investments, and risk translates into a higher cost of capital. The reverse is also true. Confidence lowers risk, which lowers the cost of capital – a necessary ingredient for the development of a successful gaming industry.

³⁶⁸ Spectrum Gaming Group, *Comprehensive Analysis: Projecting and Preparing for Potential Impact of Expanded Gaming on Commonwealth of Massachusetts*, August 1, 2008, p. 21
<http://www.mass.gov/hed/docs/eohed/ma-gaming-analysis-final.pdf>.

The ability of policymakers to push through changes and establish policies declines over time. With that in mind, policies can be established from the outset that are designed to ensure that both the state and the licensees share common goals.

Gambling as Public Funding Source

A general description of gambling as a public funding source, including: Comparison of states' reliance on and uses of gambling as a public funding source; reliability and predictability of gambling revenues; direct and indirect costs to the state.

1. States' Receipts from Gambling Revenue

States choose to legalize gambling to raise revenue for public programs or for economic development, or for both. The amount the states collect from gambling revenues is a function of several factors, including:

- The revenue performance of a state's various gambling sectors.
- The types of gambling allowed and their availability to key population centers.
- The tax rate on gambling revenue, or other fees and obligations.
- The public policy – or underlying purpose of why gambling was established. In Nevada, for example, the low casino-revenue tax rate has spawned the development of multibillion-dollar resorts, which in turn collect sales and lodging taxes that do not show up in gambling-specific revenue reports.

For data in this section, Spectrum relies on (and has the permission to use) reports by The Nelson A. Rockefeller Institute of Government at the University at Albany (NY), which annually tracks state receipts from gambling. Its most such recent report, *Back in the Black: States' Gambling Revenues Rose in 2010*,³⁶⁹ by Lucy Dadayan and Robert B. Ward, provides comprehensive data and analysis on this important subject.

For some states, gambling is an integral part of their fiscal health and hence their governments closely monitor the performance of their various gambling sectors – and may help explain the economic need by some states to expand to either sustain or grow revenues. As noted later in this section, gambling receipts accounted for more than 5 percent of own-source general revenue for five states in FY 2009.³⁷⁰

³⁶⁹ Lucy Dadayan and Robert B. Ward, *Back in the Black: States' Gambling Revenues Rose in 2010*, June 23, 2011 http://www.rockinst.org/pdf/government_finance/2011-06-23-Back_in_the_Black.pdf. The authors expect to release their updated version in mid-2013.

³⁷⁰ Ibid.

First, we present the dollar amounts that gambling in four primary sectors – casinos (commercial; i.e., non-Native American), racinos (racetrack casinos), lotteries and pari-mutuel – generated for its host states:

Figure 41: States' gambling revenue from lotteries, casinos, racinos and pari-mutuels, FY 2010

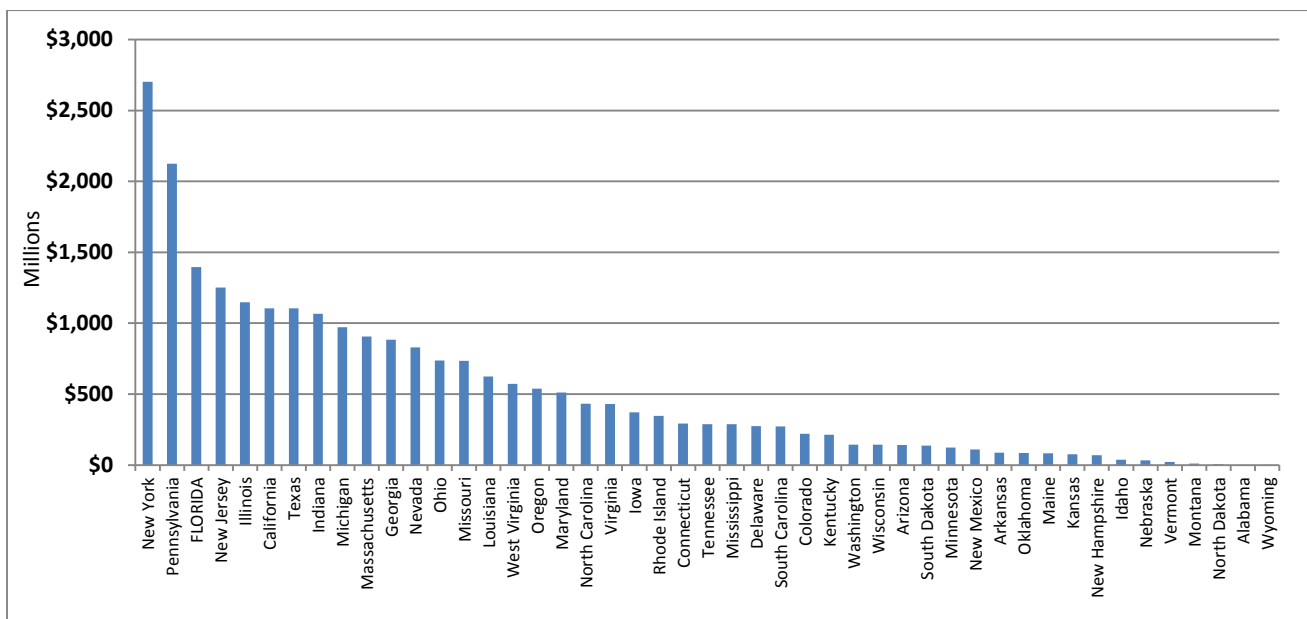
In \$ millions	Lottery	Casino	Racino	Pari-mutuel	Total
Alabama				2.1	2.1
Arizona	141.9			0.3	142.1
Arkansas	82.8			4.7	87.5
California	1,089.7			15.5	1,105.3
Colorado	112.9	107.7		0.5	221.1
Connecticut	285.5			7.1	292.6
Delaware	36.9		237.7	0.1	274.7
Florida	1,246.8		138.1	11.5	1,396.4
Georgia	883.9				883.9
Idaho	36.5			0.9	37.4
Illinois	657.9	483.0		7.0	1,147.9
Indiana	189.7	752.4	120.3	4.5	1,066.9
Iowa	57.9	209.8	100.8	3.9	372.4
Kansas	69.0	5.6		0.0	74.6
Kentucky	214.3			0.0	214.3
Louisiana	133.7	426.1	58.7	5.3	623.7
Maine	52.2		28.2	2.4	82.8
Maryland	510.6			1.5	512.1
Massachusetts	903.5			2.1	905.6
Michigan	713.7	250.8		6.7	971.1
Minnesota	122.2			0.6	122.9
Mississippi		287.0			287.0
Missouri	259.7	474.7			734.4
Montana	10.6			0.1	10.7
Nebraska	32.0			0.1	32.1
Nevada		829.3			829.3
New Hampshire	66.2			1.6	67.8
New Jersey	924.2	327.3			1,251.5
New Mexico	43.6		65.1	0.0	108.8
New York	2,214.7		464.0	22.5	2,701.1
North Carolina	432.2				432.2
North Dakota	5.7			0.3	6.0
Ohio	728.6			8.4	737.0
Oklahoma	70.0		13.9	1.3	85.1
Oregon	536.0			3.0	539.0
Pennsylvania	915.7	319.6	871.0	17.5	2,123.8
Rhode Island	55.6		289.1	1.5	346.1
South Carolina	272.4				272.4
South Dakota	119.8	17.0		0.4	137.2
Tennessee	288.9				288.9
Texas	1,094.6			10.3	1,104.9
Vermont	21.6				21.6
Virginia	430.3				430.3
Washington	142.5			2.0	144.5
West Virginia	39.8		529.2	3.3	572.3
Wisconsin	143.8			0.3	144.2

In \$ millions	Lottery	Casino	Racino	Pari-mutuel	Total
Wyoming				0.2	0.2
US Total	16,389.9	4,490.3	2,916.0	149.6	23,945.9

Source: The Nelson A. Rockefeller Institute of Government. Racino VLT revenues are included in Lottery.

Next, we rank the states by total gambling receipts for FY 2010. The states with the highest gambling revenues do not necessarily generate the highest state tax receipts because their tax rates may be lower and/or they may have fewer types of legalized gambling. Nevada generates more than three times the casino revenue than any other state, yet that state’s receipts from gambling ranked only 10th best – because it has the lowest casino-revenue tax in the country (6.75 percent) and because it has no lottery and no pari-mutuel. Note that Florida ranked third, behind New York and Pennsylvania.

Figure 42: States’ FY 2010 overall gambling revenue, by rank



Source: The Nelson A. Rockefeller Institute of Government

Comprehensive data for state receipts from Native American gaming operations are not available, either because they are not taxed or the data are proprietary. The Rockefeller Institute did collect data from nine states that have the largest collections of Indian gaming receipts:

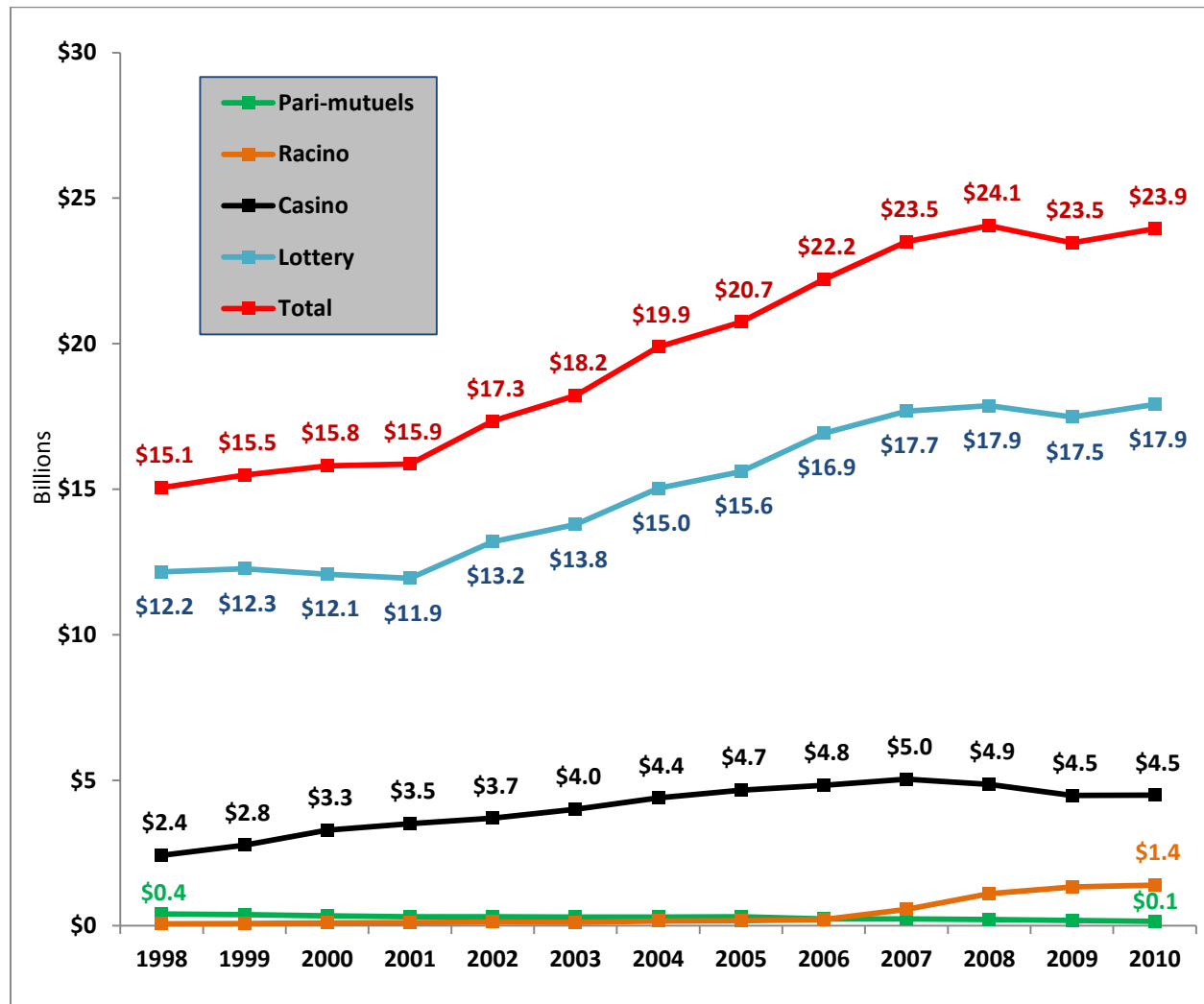
Figure 43: State receipts from largest Native American casino states

\$ millions	FY 2008	FY 2009	FY 2010
Arizona	111.2	97.5	89.0
California	244.7	408.8	411.0
Connecticut	411.4	377.8	359.3
Florida	n/a	n/a	287.5
Michigan	53.9	55.7	38.8
New Mexico	65.5	63.7	62.7
New York	148.0	70.4	129.6
Oklahoma	71.6	92.8	14.2
Wisconsin	45.1	121.8	52.2
Subtotal	1,151.3	1,288.7	1,444.2

Source: The Nelson A. Rockefeller Institute of Government

Now we look at the US trend in state receipts from gambling, by sector, from FY 1998 through 2010. Note in the following chart that receipts declined after the Great Recession began in 2007. The gambling industry had until that time proven to be resistant to economic downturns, but the two largest sectors – casinos and lotteries – experienced revenue declines coinciding with the recession. The racino industry was still very much undergoing widespread expansion and thus remained in a growth mode. Regarding racino revenue, it is important to note that The Rockefeller Institute groups VLT revenue from racetracks with lottery revenues, impacting the classification of racino receipts from Delaware, New York, Rhode Island and West Virginia (and, going forward, Ohio). The pari-mutuel industry continued its long, steady decline, with state revenues plunging from \$554 million in 1993 to \$150 million in 2010.

Figure 44: Trends in state gambling revenue, FY 1998-2010



Source: The Nelson A. Rockefeller Institute of Government, citing Census Bureau (lottery & pari-mutuels), Rockefeller Institute review of state gaming regulatory agencies' financial reports. Lottery data for FYs 2008-10 is based on Rockefeller Institute survey of state lotteries.

As noted previously, some states are more reliant on gambling receipts than others. Nevada, which has 265 casinos and in 2012 reported gross gaming revenue of \$10.9 billion, in FY 2009 relied on gambling receipts for 12.5 percent of its own-source general revenue. Rhode Island and West Virginia, whose lotteries operate racetrack casinos (with video lottery terminals in lieu of bona fide slot machines), each relied on gambling receipts for 8.4 percent of their FY 2009 own-source general revenue, as shown in the following table (on two pages). The total for all states was 2.4 percent.

Figure 45: States' reliance on gambling revenue

	Gambling revenue as share of share of own-source revenue, FY 2009	Percent change in gambling as share of own-source revenue, FY 1998-2009
Nevada	12.5	-3.3
Rhode Island	8.4	3.9
West Virginia	8.4	6.0
South Dakota	6.2	-1.9
Indiana	5.1	1.1
Oregon	4.9	-2.1
Delaware	4.9	-1.8
Missouri	4.8	1.1
Louisiana	4.6	0.9
Pennsylvania	4.5	1.9
Georgia	4.0	0.2
Mississippi	3.6	-1.0
Iowa	3.6	0.7
New Jersey	3.5	-1.1
Florida	3.3	0.3
Michigan	3.1	0.7
Illinois	3.0	-0.2
New York	3.0	-0.3
Massachusetts	3.0	-1.0
Maryland	2.4	-0.9
Ohio	2.0	-1.8
South Carolina	2.0	2.0
New Hampshire	1.9	-1.2
Tennessee	1.8	1.8
Connecticut	1.8	-0.6
Texas	1.8	-1.5
Virginia	1.6	-0.1
Maine	1.6	-0.1
Colorado	1.6	-0.5
North Carolina	1.5	1.5
Kentucky	1.5	-0.4
New Mexico	1.3	0.9
California	0.9	-0.2
Idaho	0.9	0.1
Arizona	0.8	-0.1
Oklahoma	0.7	0.6
Kansas	0.7	-0.3
Wisconsin	0.6	-0.3
Vermont	0.6	-0.9

	Gambling revenue as share of share of own-source revenue, FY 2009	Percent change in gambling as share of own-source revenue, FY 1998-2009
Minnesota	0.6	0.1
Washington	0.5	-0.3
Nebraska	0.5	0.0
Montana	0.3	-0.1
North Dakota	0.2	0.2
Arkansas	0.1	-0.1
Alabama	0.0	0.0
Wyoming	0.0	0.0

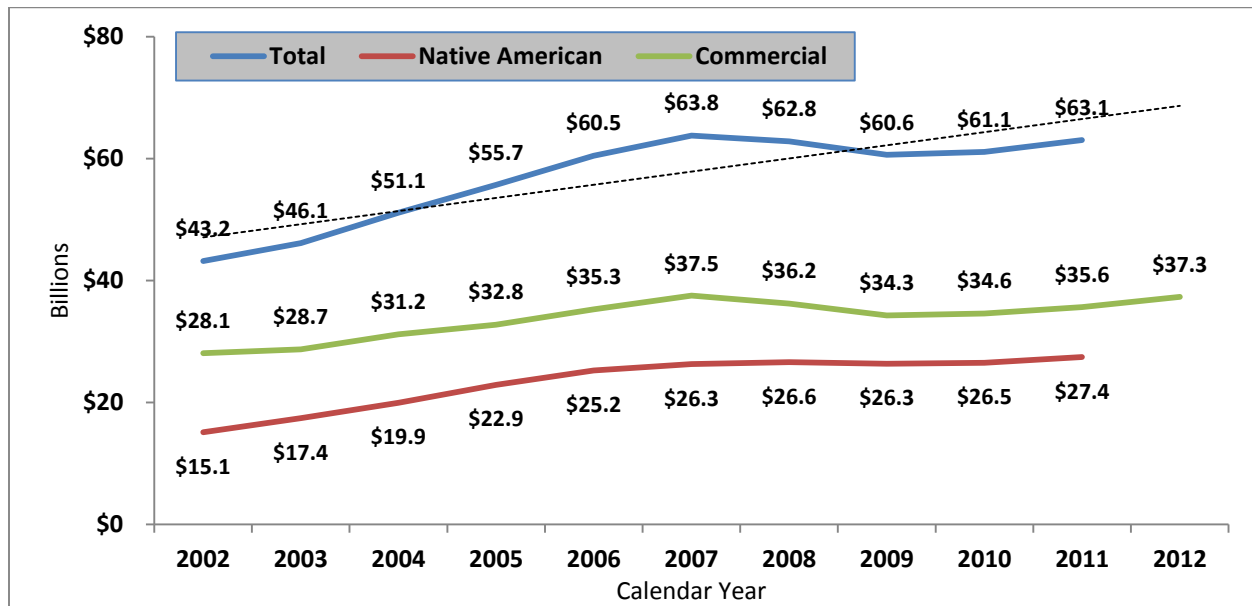
Source: The Nelson A. Rockefeller Institute of Government. Three states not listed: Utah and Hawaii have no legalized gambling, Alaska has only Class II Indian gaming, which is not taxed.

2. Reliability of Gambling Revenues

As shown in Figure 44, legalized gambling generally provides a reliable revenue stream for governments, on a holistic level, except in times of severe recession. At the individual state level, however, gambling-revenue receipts are subject to rapid – and sometimes dramatic – declines when a neighboring state introduces a competing product that is within easy reach. This is most notable in Delaware and New Jersey, where the introduction of competing casinos in neighboring states has caused casino-tax receipts to decline 6 percent and 45 percent, respectively, from their peak collection years of 2011 and 2006, respectively.

Nationally, in 2011 (the most recent period available for both sectors), commercial and Native American casinos (including VLT racinos, which in Figure 41 are instead grouped as Lottery revenue) throughout the United States generated \$63.1 billion of gross gaming revenue. This is depicted in the following chart (the dotted line indicates overall linear trend in US gross gaming revenue).

Figure 46: US GGR trend, 2002-2011



Source: American Gaming Association, Casino City’s Indian Gaming Industry Report, 2013 Edition

In total, over the 10-year period (ended 2011), year-over-year growth occurred in eight of the 10 years, with the Great Recession causing revenue declines in 2008 and 2009. The breadth and depth of the recession effectively shattered the truism that casino gambling was recession-resistant. Total growth in US gross gaming revenue (from 2002 to 2011) was 46 percent, or average annual growth of 4.3 percent. This growth was considerably greater than overall growth in the Consumer Price Index³⁷¹ – which grew by 25 percent over the entire period, or average annual growth of 2.5 percent.³⁷²

For 2012, as noted earlier, commercial casinos had gross gaming revenue of \$37.3 billion, a 4.8 percent increase over 2011 figures.³⁷³ Comparable data for Native American casinos will not be available until later this year; however, assuming there is no decrease in Native American gaming revenue (i.e., 2012 vs. 2011) will equate to total US gross gaming revenue posting at least a 2.7 percent year-over-year increase – marking the third consecutive year of revenue growth.

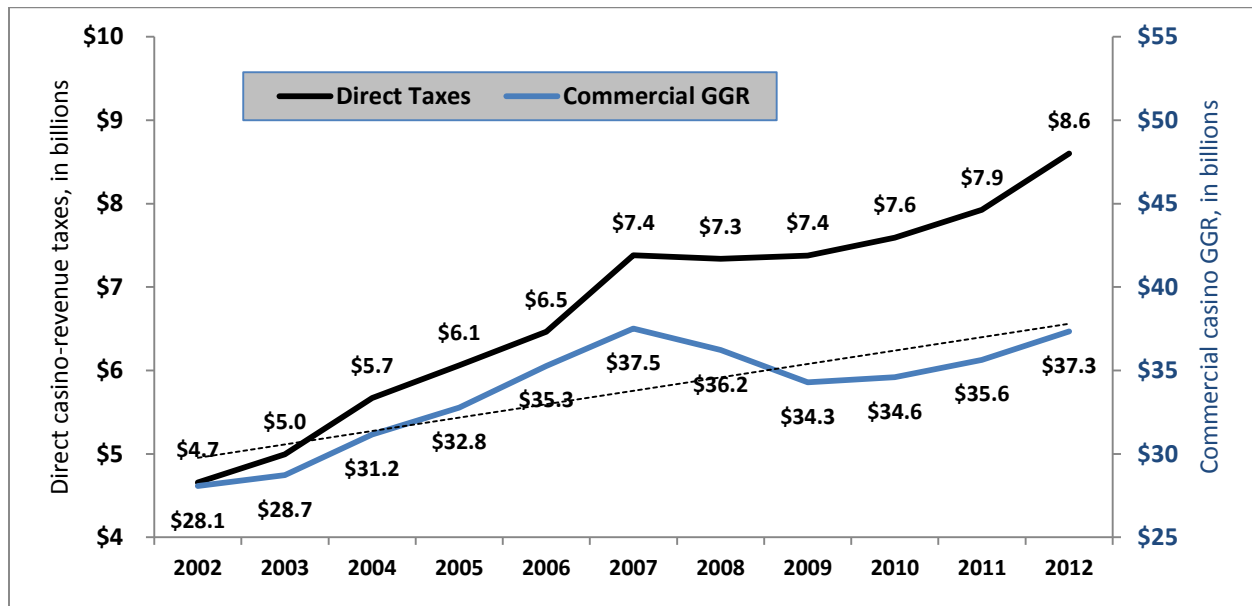
The following chart shows gross gaming revenue (and a dotted line indicating overall linear trend) from US casinos juxtaposed with the direct casino-revenue taxes paid from calendar year ended 2002 through 2012.

³⁷¹ These data represent changes in prices of all goods and services purchased for consumption by all US urban households.

³⁷² US Department of Labor, Bureau of Labor Statistics; http://www.bls.gov/data/inflation_calculator.htm.

³⁷³ 2013 State of the States, p. 5.

Figure 47: US GGR and direct taxes trend, 2002-2011



Source: American Gaming Association, UNLV Center for Gaming Research³⁷⁴

In total, over this 11-year period, year-over-year growth in direct taxes stemming from casino revenue occurred in 10 of the 11 years (as 2008 was down 0.6 percent versus prior year). Total growth in direct taxes stemming from US commercial gaming revenue (from 2002 to 2012) was 84.7 percent, or average annual growth of 6.3 percent. This growth was considerably greater than overall growth in the Consumer Price Index³⁷⁵ – which grew by 25 percent over the entire period, or average annual growth of 2.5 percent.³⁷⁶

The aforementioned direct taxes reflect results of commercial casino operations in 23 states. Importantly, netting out new casinos and/or jurisdictions (i.e., those not having casinos at start of the aforementioned period), of the 15 states that had casinos (and direct taxes) in both 2002 and 2011 the direct taxes stemming from casino revenue were up 19.9 percent, or average annual growth of 2 percent.

3. Direct and Indirect Costs to the State

The costs that legalized gambling may impose on state and local governments are both direct and indirect. Direct costs, such as specific transportation infrastructure improvements or the costs of additional law enforcement officers, are easy to identify and quantify. Indirect costs

³⁷⁴ See http://gaming.unlv.edu/reports/direct_taxes_casino.pdf

³⁷⁵ These data represent changes in prices of all goods and services purchased for consumption by all US urban households.

³⁷⁶ United States Department of Labor, Bureau of Labor Statistics http://www.bls.gov/data/inflation_calculator.htm

are not. These costs may be somewhat removed and tangential to the precipitating cause. For example, consider an individual who loses his job due to problem-gambling-related behavior and goes on unemployment. The connection between this person's unemployment and problem gambling may not be readily established. It may remain "hidden" and simply be attributed to downsizing. Ascribing indirect costs to legalized gambling also presents another challenge. Where do you draw the line? Can anything that can even be remotely linked to gambling be considered an indirect cost?³⁷⁷

The proliferation of legalized gambling and the apparent strong public support for it may understandably lead one to believe that the social costs of gambling exist within an acceptable range or are sufficiently offset by its benefits. As recently as March 5, 2013, nearly 62 percent of the voters in Linn County, IA, an economically vibrant and white collar area, approved a new casino despite a strong opposition movement that emphasized the negative costs of gambling.³⁷⁸ Currently, all but two states, Hawaii and Utah, have some form of legalized gambling. However, opponents might argue that the proliferation of gambling is attributable to financially powerful, politically influential pro-gambling forces that have successfully defined and manipulated public understanding of the issue.

According to the American Gaming Association, a 2013 poll found public acceptance of gambling to be at the highest level of the past decade. Some 85 percent of Americans view casino gambling as an acceptable activity for themselves or others. Overall acceptability is above 80 percent for all age groups and is highest among younger individuals, those age 21 to 39, and lowest, 82 percent, among those age 60 and over.³⁷⁹

The national experience seems to indicate that while more accepting of legalized gambling, the public wants it to be contained within a strict regulatory framework. As the 1999 National Gambling Impact Study noted, "Governments determine which kinds of gambling will be permitted and which will not; the number, location, and size of establishments allowed; the condition under which they operate; who may utilize them and under what conditions; who may work for them; even who may own them. And because governments determine the level and type of competition to be permitted...they are also a key determinant of the industries' potential profit and losses."³⁸⁰

³⁷⁷ Douglas M. Walker, "Problems in Quantifying the Social Costs and Benefits of Gambling," *American Journal of Economics and Sociology*, July 2007, p. 615.

³⁷⁸ Rick Smith, "Linn County voters overwhelmingly approve Cedar Rapids casino," WFCCourier.com, March 5, 2013. http://wfcourier.com/news/local/linn-county-voters-overwhelmingly-approve-cedar-rapids-casino/article_7759975e-8615-11e2-923f-0019bb2963f4.html13

³⁷⁹ *2013 State of the States*, p.2.

³⁸⁰ NGISC, p. 1-4.

Many state and local governments are in a conflicted position when it comes to legalized gambling. They are often the beneficiaries of increased tax revenues, but they must also bear the financial burden of any social dysfunction caused by gambling. States that operate lotteries are actually gambling providers and maintain an exclusive monopoly on that service.

No responsible public official wants to harm his community. The challenge public officials confront is knowing what gambling-related course of action will produce desired results given strong and conflicting public opinion and data.

Debate over the benefits and costs of legalized gambling starts with the definition of exactly what is a social “cost” and a “benefit.” Economist Douglas Walker³⁸¹ notes that researchers fail to agree on the appropriate way to conceptualize and quantify how gambling may affect society. He identified the need for a standardized methodology for measuring the costs and benefits of legalized gambling and believes that public policy debate is hampered by the lack of such a model.³⁸² Measuring and comparing “social costs” across governmental jurisdictions can also present challenges. For example, if one community elects to commit considerable funds to battle problem gambling and another similar community does not, is it reasonable to assume that problem gambling is greater in the former community?³⁸³

According to Walker, it is important to understand this distinction because the level of government expenditures may not necessarily reflect the magnitude of a social problem. Another aspect of this is that a well-funded, effective public program located in one community, may attract clients from outside that community and thereby inflate the local extent of the problem. A good example of this is services provided to homeless persons.

Economist Earl Grinols has written extensively on the benefits and costs of legalized gambling. According to Grinols, the social costs of gambling mainly fall into nine categories: crime costs, business and employment costs, bankruptcy, suicide, illness related to pathological gambling, social service costs, direct regulatory costs, family costs, and abused dollars.³⁸⁴

a. Crime

Of the costs associated with legalized gambling, crime is usually a foremost governmental concern. It has a direct impact on a community’s resources and quality of life. Any increase may require the allocation of additional resources that could offset the potential revenue

³⁸¹ Walker has worked on various Spectrum projects, and participated in the research and writing of this report. Walker is referenced as a third-party in this report in areas where we are citing his work that was performed independently of Spectrum.

³⁸² Walker, “Problems in Quantifying the Social Costs and Benefits of Gambling,” pp. 609 – 645.

³⁸³ Ibid. p. 617-618.

³⁸⁴ Earl L. Grinols, *The Hidden Social Costs of Gambling*, Center for Christian Ethics Baylor University, 2011, p. 21. <http://www.baylor.edu/content/services/document.php/144584.pdf>.

benefits of legalized gambling. Crime may also lower the quality of life in a given area, causing residents and businesses to leave and result in urban blight. Of all the arguments against legalized casino gambling, the concern that casinos will bring more crime into a community is among the most common. On the other hand, casino gambling is believed by some advocates to help reduce crime by providing good employment opportunities and reducing poverty.

In 2005, Maryland Attorney General J. Joseph Curran Jr. issued a report to a legislative committee on the potential impact of casino gambling in his state. He concluded, “It is simply a fiction to delude ourselves that it is possible to have casinos without more crime. Casinos would bring increases in every area of criminal activity.”³⁸⁵ The types of crime he cited included violent crimes, crimes against property, insurance fraud, juvenile crime, drug and alcohol related crime, domestic violence and child abuse. These crimes are driven by pathological gambling and organized crime elements.³⁸⁶ According to Curran, this increased crime would impose “tremendous costs on Marylanders.”³⁸⁷ He warned legislators that if they allowed themselves to become dependent on what he described as “a small percentage of casino profits,” they would become “trapped.”³⁸⁸

When the Massachusetts legislature was considering a casino proposal in 2008, the Massachusetts District Attorneys Association was more reserved and less strident. The group took no official position on the issue but made available a fact sheet that quoted a state legislative commission report. That report found that “... gambling expansion is likely to bring an attendant increase in crime volume, as is consistent with increases in visiting populations seen in other large developments across the country. There is no evidence conclusively pointing to an increase in crime rates from expanded gambling.”³⁸⁹

The 1999 National Gambling Impact Study Commission took a similar position when examining the relationship between crime and gambling. Due to inconsistencies in the types of crimes studied, the Commission noted that it was not surprising that the proponents of both views are able to advance research to support their views. Therefore, the Commission found the reliability of such studies questionable. The Commission concluded, “Taken as a whole the

³⁸⁵ “Report of the Attorney General J. Joseph Curran on the Impact of Casino Gaming on Crime, Presented to the Joint Executive-Legislative Task Force to Study Commercial Gaming Activities in Maryland,” October 16, 2005, p. E-2.

³⁸⁶ *Ibid.*, p. 1.

³⁸⁷ *Ibid.*, p. 3.

³⁸⁸ *Ibid.*, p. 3.

³⁸⁹ Report of the Massachusetts Commission to Study the Potential Expansion of Legalized Gaming, Prepared for Governor Jane Swift, 2002. Quoted in “Casino Gambling and Crime,” Massachusetts District Attorney Association, March 12, 2008, p. 1.

literature shows that communities with casinos are just as safe as communities that do not have casinos.”³⁹⁰

In a 2005 study published in *The Review of Economics and Statistics*, Grinols and Mustard examined the relationship between casinos and crime using county-level data for the United States between 1977 and 1996. Their sample covered all 3,165 US counties and focused on the seven FBI indexed crimes: aggravated assault, rape, robbery, murder, larceny, burglary, and auto theft. They found that most factors that reduce crime occur before or shortly after a casino opens. Those that increase crime, such as problem and pathological gambling, occur over time. They concluded that the effect on crime is low shortly after a casino opens and escalates over time.³⁹¹ Although Grinols and Mustard considered their study to be one of the most comprehensive in terms of the counties covered and the variables used, it was not without its critics.

Walker faulted the Grinols and Mustard study for not adequately addressing the issue of causation: “Their results are invalid because of a variety of serious problems in their data and analysis. The authors simply compared casino to non-casino counties. But they did not control for the volume of tourists, so the crime effect they found may have been caused by tourism generally rather than casino tourism specifically. To show a valid link between crime and casinos, the authors would have needed to compare casino counties to other counties with non-casino tourism.”³⁹² Walker believes that since few, if any, of the researchers Grinols and Mustard cite acknowledge this issue or account for it, the result is an overstatement of the social costs of casino gambling on government and society.³⁹³

In a 2011 study, Grinols, Mustard and Staha studied the issue of how the type of visitors may affect crime. In an exhaustive study that analyzed data on National Park visitors between 1979 and 1998 in every county in the United States, they concluded that the type of visitor and the nature of the attraction have significantly different effects on crime rates.³⁹⁴

³⁹⁰ NGISC, p. 7-14.

³⁹¹ Earl L. Grinols and David B. Mustard, “Casinos, Crime and Community Costs,” *The Review of Economics and Statistics*, February, 2006, pp. 28-45.

³⁹² Douglas M. Walker, “Challenges that Confront Researchers on Estimating the Social Costs of Gambling,” American Gaming Association 10th Anniversary White Paper Series, January 2008. p. 8. See also Douglas M. Walker, “Problems in Quantifying the Social Costs and Benefits of Gambling,” *American Journal of Economics and Sociology*, July 2007, pp. 609-645.

³⁹³ *Ibid.* p. 9.

³⁹⁴ Earl L. Grinols, David B. Mustard and Melissa Staha, “How do Visitors affect Crime?” *Journal of Quantitative Criminology*, Vol. 27, 2011, pp. 363-378. Accessed at <http://files.campus.edublogs.org/blogs.baylor.edu/dist/0/221/files/2011/11/How-Do-Visitors-Affect-Crime-2011-1mb82v1.pdf>,

Obviously, conflicting studies and interpretations of data present a huge challenge to state and local policy makers attempting to accurately gauge how casino gambling related crime might affect their communities. Another complication in analyzing the crime related costs of legalized gambling is that costs are often dispersed among various levels of government – federal, state, county and municipal. For example, the costs of criminal investigations and prosecution may be borne by county government and the costs of imprisonment by the state.

b. Public Health

Public health is another area in which state and local governments are both directly and indirectly impacted by legalized gambling. The World Health Organization, which established standardized definitions for community health care, broadly defines “health” as “The state of complete physical, mental, and social well-being and *not merely the absence of disease or infirmity.*”³⁹⁵ Advocates of casino gambling often cite its potential to improve the overall wellness of the community in many ways. Chief among these is the potential to create employment with tangible benefits such as good incomes, adequate health insurance, and access to quality health care. Such positive outcomes would improve the quality of life, vitality and overall well-being of a community.

Opponents are quick to point out that negative community health impacts may also accompany the advent of legalized gambling. Many of these would be related to pathological and problem gambling, which have been associated with unhealthful behaviors and outcomes such as drug and alcohol abuse, nicotine dependence, depression and insomnia. It has also been associated with higher rates of child abuse and neglect, domestic violence, unsafe sex and family break up. Such adverse outcomes weaken a community’s vitality and diminish its quality of life.

How effective the response to a public problem will be depends on how accurately the problem is understood. Addressing the challenge of problem and pathological gambling is difficult since an individual may be plagued by other pre-existing disorders such as drug and alcohol abuse or mental illness. Again, the question of causation must be addressed. Simply because certain types of behaviors are associated with gambling does not necessarily mean that gambling caused them. This condition is known as co-morbidity.

Co-morbidity was cited as a consideration by the 1999 National Gambling Impact study Commission. It noted: “Pathological gambling often occurs in conjunction with other psychological problems, including substance abuse, mood disorders, and personality disorders. The joint occurrence of two or more problems – termed co-morbidity – is an important, though complicating factor in studying this disorder. Is problem or pathological gambling a unique

³⁹⁵ “A Glossary of Terms for Community Health Care and Services for older Persons,” WHO Centre for Health Development Ageing and Health Technical Report Volume 5, 2004, http://www.who.int/kobe_centre/ageing/ahp_vol5_glossary.pdf. (Emphasis not in original.)

pathology that exists on its own or is it merely a symptom of a common predisposition, genetic or otherwise, that underlies all addictions?”³⁹⁶

Walker picks up on this point. “If gambling were not an option, a person who is predisposed to a pathological disorder may manifest his disorder in other unhealthy ways. Many pathological gamblers have other behavioral disorders. ... If pathological gambling is simply a symptom of some more basic disorder, then, it is the more basic disorder rather than gambling itself that is the underlying cause of the adverse consequences and social costs of the pathological gambling.”³⁹⁷ He notes that according to the DSM-IV criteria, a person coping with bipolar disorder, who may meet all of the criteria for pathological gambling, is not considered a pathological gambler if the individual also meets the criteria for a Manic Episode, and the Manic Episode is responsible for excessive gambling.³⁹⁸

Similar questions arise if an individual is both an alcoholic and a compulsive gambler who abuses and neglects his family. To what extent is his alcoholism responsible for the harm and distress he causes his wife and children as opposed to his compulsive gambling?

The data do suggest that individuals who are afflicted with these sorts of behavioral disorders may be more inclined to problem gambling. However, even if opportunities to gamble were not readily available, government would still need to cope with the various manifestations of these other problems. The failure of policy makers to take co-morbidity into account may lead one to overstate the negative impacts of legalized gambling and lead to sub optimal government policies and programs designed to respond to those impacts.

How to manage any negative health impacts of gambling is clearly a concern to many state and local officials. As with crime, they will find little definitive guidance in the literature, which is often conflicting and ambiguous. Framing the problem with adequate precision to shape and enable an effective public policy response may be difficult.

A further complication is that what is often perceived as benefit of casino gambling may have some inherent negative health aspects as well. For instance, family sustainable employment is good, but employment in a casino can expose workers to long periods of second-hand smoke, of which the adverse health effects are well known.³⁹⁹ Shift workers and those required to work long hours can experience considerable disruptions of family and social activities since many of these are day oriented. Weekend work schedules can impede involvement in family sporting events or religious activities and diminish supportive social connections with those whose daily

³⁹⁶ NGISC, p. 4-3.

³⁹⁷ Walker, “Challenges that Confront Researchers on Estimating the Social Costs of Gambling,” p. 2.

³⁹⁸ Ibid.

³⁹⁹ “The Health Effects of Second Hand Smoke,” Centers for Disease Control and Prevention http://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/health_effects/ (accessed May 18, 2013).

schedules are no longer similar. Family relationship strain can occur when one can no longer adequately assist with child care, shopping and housework. Many of these negative aspects may be ameliorated by a better understanding of them and adaptations and accommodations in the workplace.⁴⁰⁰

It is critical that state and local governments considering or already affected by legalized gambling evaluate and understand all its potential aspects. Many communities impacted by legalized gambling respond to public health concerns by conducting a community health impact assessment (“HIA”). An HIA is an informational tool designed and implemented by the local community to enable decision-makers to consider the health implications of proposed policies, especially policies that do not appear to have a direct health connection. It has three core functions: assessment, policy development and assurance.⁴⁰¹

An excellent example of a HIA for a community considering legalized gambling is the Kansas HIA Project.⁴⁰² It was conducted by the Kansas Health Institute, and funded in part with grants from the Health Impact Project, a collaborative effort by the Robert Wood Johnson Foundation and the Pew Charitable Trusts. The Kansas HIA Project thoroughly examined how the presence of a local casino could affect health, both positively and negatively. It examined potential risks, such as second-hand smoke exposure, traffic accidents, problem and pathological gambling, divorce and suicide. It also analyzed potential community benefits, such as job creation, increased tourism, increased state and local revenues, and health insurance. The goal of the assessment was to bring all health implications up for informed consideration and debate. The Kansas HIA believe they succeeded in that goal.⁴⁰³

c. Traffic and Transportation Infrastructure

There are several pathways through which casino gambling may impact the state and local government transportation infrastructure. The roadway system needed to support increased levels of traffic may already be old, at capacity, or inadequately designed to accommodate new traffic patterns. The cost to bring the infrastructure up to requisite standards can be hundreds of millions of dollars. Impacts may also extend to public transportation. State and local governments may see train, bus or subway traffic increase to uncomfortable levels on certain routes requiring that they increase service levels. They may also feel pressure to establish unprofitable routes in order to transport workers who might otherwise be unable to get to work.

⁴⁰⁰ “Shiftwork: Health Effects & Solutions,” Occupational Health Clinics for Ontario Workers Inc., revised 2005 <http://www.nupge.ca/files/Shiftwork> (accessed May 18, 2013).

⁴⁰¹ “Community Health Assessment and Improvement Planning,” National Association of County & City Health Officials <http://www.naccho.org/topics/infrastructure/CHAIP/index.cfm> (accessed May 18, 2013).

⁴⁰² “Potential Health Effects of Casino Development in Southeast Kansas, Kansas Health Institute, October 2012 http://media.khi.org/news/documents/2012/10/23/Complete_HIA_Report.pdf.

⁴⁰³ *Ibid.*, p. 100.

In many cases, a casino developer may agree to share some of the estimated costs of improvement or public transportation service as part of his approval process. In other cases, government may assume a portion of these costs in order to get a casino project going to enjoy other economic benefits.

In New Jersey in the mid-1990s, under Governor Christie Whitman, the state agreed to fund \$275 million in major roadway improvements to facilitate the development of a new casino resort proposed by Mirage Resorts and its CEO, Steve Wynn. It is currently the site of the Borgata Casino Hotel & Spa in Atlantic City. Donald Trump, who owned a casino on an adjacent property, strongly fought against the proposal.⁴⁰⁴ He withdrew his opposition after the state included in the plan an access improvement to one of the casinos his company operated at the time.

One of the more immediate impacts state and local government may feel upon opening a new gaming facility is an increase in traffic on local roadways. The degree of the impact is subject to many of the aforementioned variables as well as the scale and location of the new facility. Sometimes, the impacts of traffic are felt regionally, in nearby communities that may have had no say in the development process. Connecticut was one of the first states to have Indian gaming, as it was forced upon it by a federal court decision. It can serve as an important example for two reasons. It demonstrates how the impact of a casino can transcend municipal boundaries and it shows how the lack of good regional planning can exacerbate their more challenging impacts.

Concerns regarding the impact of traffic were substantiated in an impact study Spectrum did for the State of Connecticut in 2009.⁴⁰⁵ Foxwoods opened its resort-casino in Ledyard in 1992 on Mashantucket Pequot Indian tribal land. According to Mayor John Rodolico, “The most immediate effect was the increase of traffic on roads,” Rodolico stated. “They’ve had tens of thousands of people going there from the day they opened.”⁴⁰⁶ Increased traffic volumes caused serious deterioration on old farm roads that were not up to handling the heavier traffic.

d. Law Enforcement and Emergency Services

Emergency services are those services provided by various levels of government such as police, fire and emergency medical responders that protect citizen lives and ensure public safety. Collectively, they are often referred to as “first responders” since they are usually among the first to arrive at the scene of a crime, emergency or disaster.

⁴⁰⁴ “Government support for Atlantic City casino raises eyebrows,” CNN.Com, August 26, 1997 <http://www.cnn.com/US/9708/26/tunnel/>.

⁴⁰⁵ *Gambling in Connecticut*.

⁴⁰⁶ Lindsay Corcoran, “Lessons from Connecticut’s casino experience,” *The MetroWest Daily News*, March 24, 2013 http://www.metrowestdailynews.com/news/x1522344116/Lessons-from-Connecticuts-casino-experience?zc_p=0.

The impact of *non-criminal* demands on local law enforcement and other first responders is often overlooked or given secondary consideration in gambling impact studies. What impact will an attraction that operates on a 24-hour basis, seven days a week have in terms of additional service calls to the local police department for 911 emergencies, motor vehicle breakdowns, traffic accidents, disorderly persons, lost or missing property, missing and dispute resolutions?

Within the first year after the Horseshoe Casino Cleveland opened in Ohio, the city incurred \$3.1 million in additional expenses related to the police department largely due to increased visitors and activity in its downtown area.⁴⁰⁷ According to the *Maryland Gazette*, the creation of a special county police unit for the area was necessary to keep a lid on problems in the vicinity of the new Maryland Live Casino in Hanover.

Spectrum's Connecticut gambling impact study found that the City of Norwich felt significant impacts from Indian gaming casinos eight miles away. City officials estimated casino-related costs to be anywhere from \$1 million to \$2.5 million a year. They include: A 27 percent increase in motor vehicle accidents from 1991 to 2004. An increase in police overtime from \$85,000 in 1991 to more than \$280,000 in 2008. A 76 percent increase in calls for service from people needing police from 1992 to 2004.⁴⁰⁸

In some communities, local police and fire departments may be required to purchase additional equipment and provide specialized training for their workers. Government may reduce these costs by requiring gambling establishments to share the costs. To minimize the impact on local police, gambling establishments may be required to maintain certain levels of in house security personnel or establish a fee for service arrangement to cover when additional police service may be desired or required. Governments may impose additional tax assessments on gambling establishments to offset additional law enforcement costs.

e. Driving Under the Influence

Do casinos increase the number of drunk drivers on local roads? Earlier in this report, we noted that destination resorts can increase demands on law enforcement, a subject we will explore in more detail here. Casinos are known for their fast-paced environments where customers are encouraged to let loose and have a good time. This often means enjoying alcoholic beverages that may be provided complementarily to the customer while gambling or enjoyed at a casino lounge or restaurant. The anecdotal evidence would indicate a connection between an increase in drunk drivers and casinos. Drunken driving arrests were reported to have nearly

⁴⁰⁷ Thomas Ott, "Cleveland casino short of revenue projections but draws praise," *The Plain Dealer*, May 12, 2013 http://www.cleveland.com/metro/index.ssf/2013/05/cleveland_casino_short_of_reve.html.

⁴⁰⁸ *Gambling in Connecticut*, p. 13.

doubled in Bethlehem, PA, after the Sands Casino Resort opened in 2009 while they have remained consistent in a nearby non-casino county.⁴⁰⁹

In 2009, Norwich, CT, located near two Indian gambling casinos, reported that DUI arrests had more than doubled since 1992. The towns of Montville and Ledyard also experienced significant increases. Roughly 20 percent of the motorists in Montville, Ledyard and North Stonington arrested for DUI acknowledged to police that their last drink was at a casino. One such motorist was charged with manslaughter in March 2009 for allegedly causing a fatal accident by driving the wrong way on I-395.⁴¹⁰

In what is considered one of the first empirical studies on the subject, Chad D. Cotti and Douglas M. Walker explored whether there is a link between casino expansion and alcohol-related fatal traffic accidents. They found that in urban areas, casinos actually reduce the rate of DUIs, while the rate for suburban and rural areas increases. They believe the difference may be that in urban areas the shorter driving distances, availability of public transportation, and substitution of gambling for bar-hopping might account for the decreased rate, while the rate increase in less populated areas is caused by the increase in distance driven by alcohol-impaired drivers.⁴¹¹

There are several ways in which governments respond to the problem of intoxicated driving. Public education campaigns can make people more aware of the dangers of drunk driving and the severe penalties for it. Strict enforcement and police tactics such as drunk driving check points are also effective. Ensuring that the proprietors of establishments that serve alcoholic beverage properly train their staff on how to detect and handle intoxicated patrons is also necessary to reduce the problem.

f. Social Service Costs

Legalized gambling is believed to impose higher costs on governments by attracting more people to the area who may sooner or later need assistance from government programs. These individuals may have come as patrons of the gaming facility or in search of work. The energy and 24-hour activity attendant with casinos is a special attraction for the homeless or otherwise financially destitute. It offers opportunities to panhandle and to seek temporary respite and accommodation in the public areas of facilities that may be open 24 hours daily.

⁴⁰⁹ Zach Lindsey, "Sands Casino linked to increase in DUIs by Northampton County report," *The Express-Times*, July 22, 2012
http://www.lehighvalleylive.com/bethlehem/index.ssf/2012/07/sands_casino_linked_to_increas.html.

⁴¹⁰ *Gambling in Connecticut*, p. 13.

⁴¹¹ Chad D. Cotti and Douglas M. Walker, "The impact of casinos on fatal alcohol-related traffic accidents in the United States," *Journal of Health Economics*, 2010, pp. 788-796.

A survey conducted by the International Union of Gospel Missions found what they called “compelling evidence of a link between gambling and homelessness.” According to their survey, nearly 1 in 5 homeless men and women cited gambling as a cause of their condition.⁴¹² A 2005 study found clear links between gambling and homelessness but acknowledged that other factors such as mental illness and drug and alcohol abuse may also be factors.⁴¹³

The 1999 National Gambling Impact Study Commission found that individuals with gambling problems appeared to account for a higher percentage of the homeless population. The commission noted the Atlantic City Rescue Mission reported that 22 percent of its clients are homeless due to a gambling problem.⁴¹⁴ The Atlantic City Rescue Mission says that half the state’s homeless population turns to it for services. The homeless problem in Atlantic City, received widespread attention recently when a mentally ill homeless woman randomly killed two Canadian tourists in the city’s shopping district.⁴¹⁵

The presence of a greater number of homeless individuals who are either attracted by, or adversely impacted by, a gambling facility may impose additional public costs for psychiatric and mental health counseling, public welfare, food stamps, emergency shelter operations, traveler assistance and indigent medical care. These costs would be in addition to any increase in any related law enforcement costs. The impact on the quality of life in a given area caused by vagrancy and aggressive panhandling is not readily quantifiable.

Atlantic City has begun to address its substantial homeless problems by adopting a “Single Point of Entry” model. All agencies that serve the homeless population collaborate and refer new clients to a single point of entry where they are evaluated, assigned a case manager and if appropriate, returned to their point of origin.

g. Schools

To the extent that legalized gambling and related economic development attracts more workers with families to an area, an impact on local schools is to be expected. Casinos will mostly hire service workers who will be lower paid and ethnically diverse.

⁴¹² Duncan R. Moon, “New Statistics Suggest Link Between Gambling, Homelessness,” *Christian Science Monitor*, March 16, 1998 <http://www.csmonitor.com/1998/0316/031698.us.us.1.html>.

⁴¹³ “An Exploration of the Link between Gambling and Homelessness,” Government of South Australia Department of Families and Communities, 2005. p. 2 <http://www.dcsi.sa.gov.au/pub/LinkClick.aspx?fileticket=aEsxvsdVqsY%3D&tabid=607> (accessed May 19, 2013).

⁴¹⁴ NGISC, p. 7-27.

⁴¹⁵ Lynda Cohen, “Woman charged with two Atlantic City slayings had history of mental illness,” *The Press of Atlantic City*, May 24, 2012 http://www.pressofatlanticcity.com/communities/atlantic-city_pleasantville_brigantine/woman-charged-with-two-atlantic-city-slayings-had-history-of/article_b009679e-a427-11e1-a010-0019bb2963f4.html.

In its Connecticut study, Spectrum found that in Norwich, CT, public school administrators identified annual cost of nearly \$2 million related to casinos. In order to handle the influx of immigrant workers attracted to casino jobs, the district had to create an “English for Speakers of Other Languages” program because students speak nearly 30 different languages. Students originated from Haiti, Peru, the Dominican Republic and Eastern Europe. In addition, thousands of Chinese-speaking workers were recruited from New York City in late 2001 to work at the casinos. Norwich Public Schools reported to Spectrum that in 1999 it enrolled 40 ESOL students.

Some jurisdictions address the impact on schools by requiring that a portion of casino revenues be dedicated to education. In 2009, Ohio voters amended the state constitution to allow casinos in Cleveland, Toledo, Columbus and Cincinnati. The state levies a 33 percent tax on adjusted gross gambling revenue. School districts in Ohio will share 34 percent of that tax revenue.⁴¹⁶ However, some Ohio education officials think that any casino related funding, while still desirable, would be too small to have any meaningful impact.⁴¹⁷

h. Workforce Training

The workforce required by a new gambling establishment may vary depending on its size, nature and amenities. Casino development may spur other nearby development and create even more employment opportunities. To the extent that the local latent workforce may adequately possess the skills and training necessary meet the new demand, the project can be easily assimilated into the community with little or no governmental assistance. If the local workforce is inadequate, then training and importation of workers may be necessary.

A report to the Massachusetts Gaming Commission estimates the cost of developing and training a workforce for its new casino industry at \$9 million dollars.⁴¹⁸ Responsibility for workforce training usually comes under the local Workforce Investment Board. These entities were established throughout the United States by the Workforce Investment Act of 1998. Their role is to coordinate and direct state, local and federal funding into appropriate employment training programs.

⁴¹⁶ Margo Rutledge Kissell, “Area schools to receive thousands in casino revenues,” *Dayton Daily News*, November 23, 2012 <http://www.daytondailynews.com/news/news/area-schools-to-receive-thousands-in-casino-revenu/nTCZd/>.

⁴¹⁷ Ida Lieszkovszky, “School Officials Warn Casino Funds Don’t Add Up to Much,” *StateImpact Ohio*, January 21, 2013 <http://stateimpact.npr.org/ohio/2013/01/21/school-officials-warn-casino-funds-dont-add-up-to-much/>.

⁴¹⁸ Paul Tuthill, “Casino Industry Workforce Development Cost Put At \$9 Million,” *WAMC Northeast Public Radio*, October 23, 2012 <http://wamc.org/post/casino-industry-workforce-development-cost-put-9-million>.

4. Conclusion

Gambling is a reliable and predictable funding source for governments, except in times of pronounced recession and when competition arises in neighboring states. Five states in FY 2010 relied on gambling receipts for more than 5 percent of their own-source state budget revenue.

Gambling, however, costs governments in both direct and indirect ways in such areas as crime, public health, infrastructure, law enforcement and emergency services, social services, schools (in those areas with large, high-employment casinos) and workforce training. Whether the economic benefits brought by gambling receipts outweigh its economic and social costs has been the subject of considerable research – and considerable debate.

Impacts of Gambling: Social, Criminal, Personal, Fiscal

A general description of gambling impacts, including: Social, criminal, and personal; short- and long-term fiscal.

Legalized gambling can affect society in a variety of different ways, positive and negative. Among the most common forms of legalized gambling, including lottery, pari-mutuels such as horse and greyhound racing, and casinos, the spread of legal commercial casinos has generated the most interest, concern, and debate during the past two decades. Indeed, the introduction of casinos has been a controversial subject in Florida for years; as a result, the State endeavored to study casinos back in 1995.⁴¹⁹

In this section, we provide a general description of impacts from gambling, including moral/ethical concerns; social, criminal, and personal impacts; as well as long- and short-term effects of casinos development. As commercial casinos are the most controversial form of gambling expansion currently being considered in Florida, our analysis focuses on the literature and evidence on the impacts of casinos.

The economic and social impacts of legalized gambling have been widely written about and studied. Studies generally focus on the effects of gambling as they relate to quantifiable metrics such as employment, crime, tax revenues, and problem gambling. Analyzed less are impacts that are somewhat subjective and not readily quantifiable.

1. Moral and Ethical Issues

Some people oppose gambling in all its forms, such as lotteries, race tracks, and casinos. According to a May 2013 Gallup Poll survey, 64 percent of Americans find gambling morally acceptable.⁴²⁰ From these results one may infer that 36 percent of Americans do not. Those

⁴¹⁹ Florida Office of Planning and Budgeting, "Casinos in Florida," 1995.

⁴²⁰ Frank Newport and Igor Himelfarb, "In U.S., Record-High Say Gay, Lesbian Relations Morally," Gallup, May 20, 2013 <http://www.gallup.com/poll/162689/record-high-say-gay-lesbian-relations-morally.aspx>.

morally opposed cite its negative impacts on a person's character and values. In their view, to the extent that more people gamble more readily, society's strength and vitality are undermined and weakened.

Irving Kristol, a Professor of Urban Values at New York University, articulated this point of view at a time when legalized gambling was just beginning its national proliferation in America. In 1974, he wrote an op-ed piece for *The Wall Street Journal* opposing the spread of legalized gambling. At the time, a movement to legalize gambling was underway in New Jersey. Kristol wrote that in a gambling environment, a person often succumbs to "fantasies of getting something for nothing." He felt that gambling undermined classical social virtues such as moderation, self-reliance, self-discipline, thrift, and diligence. At the same time, it encouraged classical vices such as extravagance, avarice and the lack of social responsibility.⁴²¹ Kristol believed that state supported gambling was antithetical to a capitalist society. It subverted the values capitalism needed to thrive.

The same year that Kristol wrote his op-ed, Congress established the first Commission on the Review of National Policy Toward Gambling. The purpose of the Commission was to study all aspects of gambling that existed in America at the time and to develop recommendations for the states to follow when establishing policies. In its final report, the Commission began with a direct, straightforward observation: "Gambling is inevitable."⁴²² Inevitability, however, did not mean that the Commission was insensitive to what it called the "invidious and emotional aspects" of the moral debate. The Commission acknowledged that to a significant number of Americans, "gambling ... is absolutely wrong on both religious and secular moral grounds." They warned that in sanctioning gambling, "states may be intruding into areas of sincerely held theological and ethical convictions."⁴²³ However, moral concerns were "largely unsusceptible to objective analysis." Therefore, the Commission, while recognizing religious perspectives, considered such issues somewhat beyond their purview.⁴²⁴

Kristol expressed the secular moral arguments against gambling. In testimony submitted to the Commission, clerical leaders expressed the religious arguments.⁴²⁵ They held gambling was wrong because it encouraged sloth and an obsession with money over one's fellow man. It also fostered a desire to achieve wealth without work. It distracted one from pursuing activities that brought one closer to God.

⁴²¹ Irving Kristol, "Vice and Virtue in Las Vegas," *The Wall Street Journal*, September 18, 1973, p. 20.

⁴²² Commission on the Review of the National Policy Toward Gambling Final Report, Washington, DC, 1976, p. 1.

⁴²³ Ibid.

⁴²⁴ Ibid.

⁴²⁵ For example see "Gambling in America: Appendix 1, Staff and Consultant Papers, Model Statutes, Bibliography, Correspondence," Committee on the Review of the National Policy Toward Gambling, Washington, D.C., 1976, pp. 208-210.

As public acceptance of gambling as a leisure activity increased, arguments based on its moral costs lost ground. According to the Rev. Tom Grey, spokesman for the National Coalition Against Legalized Gambling, church opposition to gambling has not been widely effective. Grey, who railed against gambling for years as a United Methodist pastor, said the argument that gambling is sinful does not adequately counter strong public unwillingness to restrict certain personal freedoms. Consequently, Grey's anti-gambling coalition now avoids explicit mentions of religion, and presents more economically based arguments that focus on addiction, bankruptcy and crime.^{426,427}

Focus on the Family, a politically influential Christian organization dedicated to protecting and strengthening families, strongly opposes all forms of legalized gambling. In their official position statement they write: "Gambling is driven by and subsists on greed. For this reason, the activity is morally bankrupt from its very foundation. Gambling is also an activity which exploits the vulnerable – the young, the old and those susceptible to addictive behaviors. Further, gambling entices the financially disadvantaged classes with the unrealistic hope of escape from poverty through instant riches... gambling undermines the work ethic. It is based on the premise of 'something for nothing,' a concept that sanctions idleness rather than industriousness, slothfulness instead of initiative."⁴²⁸

In Florida, the Ethics and Religious Liberty Commission of the Southern Baptist Convention has been a leading voice in warning about the effects of widespread gambling. The commission notes on its website:

Among the arguments advanced to justify gambling is the one which says that all of life is a gamble or a risk. But risk-taking in gambling is different from the risks involved in the normal routine of life. The risks in gambling are artificially created. In other ventures, the risk is part of the creative process. For example, the contractor risks labor and capital to build a house and make a profit. Unlike the gambler, he assumes a risk that is necessary to society's economic life, and he relies on more than chance in seeking to make a profit.

It is also argued that some people like to spend their recreation money betting on horses or playing slot machines, just as others prefer to spend theirs for a round of golf or a movie. Gambling obviously provides a kind of recreational excitement for some, but the cost to individuals, families, the economy, and society is too high to justify it.

Seen in this light, gambling is personally selfish, morally irresponsible, and socially destructive. Therefore, gambling must be vigorously resisted. Such resistance requires an

⁴²⁶ Greg Trotter, "Gambling Opponents Say Moral Argument No Longer a Trump," *Christianity Today*, March 18, 2008 <http://www.christianitytoday.com/ct/2008/marchweb-only/112-22.0.html>.

⁴²⁷ The National Coalition Against Legalized Gambling is now called Stop Predatory Gambling (<http://stoppredatorygambling.org/>).

⁴²⁸ "Our Position (Gambling)," Focus on the Family <http://www.focusonthefamily.com/socialissues/social-issues/gambling/our-position.aspx> (accessed May 23, 2013).

understanding of the problem, a workable plan of attack, and a personal commitment to work against gambling.

The gambling problem results from two interrelated factors: (1) Many people have a desire, often a compulsion, to gamble. (2) Most of these people have access to gambling opportunities. The ultimate goal of a plan of action is to control the desire to gamble and eliminate the access to gambling opportunities.

When the desire to get something for nothing and the opportunity to gamble go hand in hand, resistance to one requires resistance to the other. To attempt to eliminate the desire without abolishing the opportunity is to invite failure. It is a matter of record that as gambling becomes more accessible, more people gamble. Thus, legalization is not the answer to the gambling problem. Instead, it is one primary cause of the gambling problem.

Any adequate plan to deal with gambling must be both extensive and comprehensive. It must be extensive enough to include the spiritual, educational, and legal approaches. It must be comprehensive enough to incorporate the family, the world of work, community clubs and organizations, the church, and government.⁴²⁹

Moral opposition against gambling is not limited to the Christian community. In Maryland, both the Baltimore Jewish Council and the Baltimore Board of Rabbis officially came out against expanded gambling. Rabbi Gila Ruskin of the Harford Jewish Center and first vice president of the Baltimore Board of Rabbis stated she believes expanded gambling preys on the weak and encourages addiction. “You are exploiting people who don’t have expendable income all in the name of raising money for causes like education. But what do you tell those kids about where the money for their school came from? That we raised the funds by preying on people’s weaknesses and temptations.”⁴³⁰

The late William Eadington, who wrote extensively on the costs and benefits of gambling, noted that some opposition to legalized gambling is based on “straightforward moral disapproval” but does not examine that aspect further.⁴³¹

Notably, the successful 1976 campaign to legalize casinos in Atlantic City, NJ included religious leaders in its army of proponents. A local rabbi and the monsignor of a parochial high school in the Atlantic City region were used in radio advertisements that claimed morality was on the side of increasing employment, reducing hunger and getting families off welfare. “Many

⁴²⁹ The Ethics and Religious Liberty Commission, “Issues and Answers: Gambling” <http://erlc.com/article/issues-answers-gambling/#sthash.2TB94gsl.dpuf> (accessed June 21, 2013).

⁴³⁰ Ron Synder, “Debate over casinos in Maryland continues,” *Baltimore Jewish Times*, http://www.jewishtimes.com/index.php/jewishtimes/news/it/local_news/debate_over_casinos_in_maryland_continues/35921 (accessed May 21, 2013).

⁴³¹ William R. Eadington, “The Economics of Casino Gambling,” *Journal of Economic Perspectives*, Vol. 13, No. 3, Summer 1999, p. 187.

religious leaders believe this is the real moral issue,” the two clergy leaders said in the radio ads.⁴³²

In sum, morality has historically been a factor in shaping public policy. Capital punishment, pornography and gay marriage are some examples where much weight is placed on moral perceptions and concerns when shaping policy. It is a challenging factor since it may be difficult to reach an agreement on what is “moral” and concepts of acceptable morality may change from one community to another, as well as over time.

2. Opportunity Costs

In economics, an opportunity cost is defined as the cost incurred in forgoing the benefits of one course of action while pursuing the benefits of another. For example, one might decide to take a job right out of high school rather than go to college. In the short term, one reaps the benefits of not paying tuition costs and losing four years’ worth of salary, but in the long term, one might pay the cost of earning less income over a period of many working years.

Those opposed to legalized gambling sometimes argue that it is pursued as an economic development policy because it is easier and its financial benefits are more immediate. However, they argue that those benefits are offset by its social costs and may not be sustainable in the long term. According to opponents, while casino gambling might make local sense, especially in financially distressed communities that have few, if any, viable alternatives, the collective long term costs of its proliferation are significant and have a national impact. Thousands of workers and billions of dollars in capital are directed into investments that, they argue, do little to increase America’s overall economic strength and competitiveness in a global economy. Casino opponents argue that casinos invest little, if anything, to improve worker skills and training and capital could arguably be better invested in more productive industries.

The problem with assessing opportunity costs is that knowing the outcome of any course of action with any degree of certainty is not possible. A high-tech startup company may fail and leave a community less well off than if it had a stable, profitable casino. Ironically, choosing the best path to achieve desired economic goals is itself basically a gamble.

3. Social, Criminal, Personal Impacts

a. Negative Impacts

We now turn to a discussion of specific negative impacts that are often thought to accompany legalized gambling. The goal in this section is to provide a brief review of those impacts that have been studied and quantified in the academic literature.

⁴³² *Hostage to Fortune*, p. 15.

Disordered Gamblers

Most of the negative socioeconomic impacts often associated with gambling, and casino gambling in particular, are the result of problematic behaviors by “disordered gamblers.” These are people who gamble to an extent beyond recreational gambling such that it disrupts their career and/or personal/professional relationships.⁴³³ Psychologists estimate the prevalence rate of disordered gamblers to be between 0.4 percent and 2.0 percent of the general population.^{434, 435}

However, prevalence rates may be greater or lower in areas. In discussing this issue with representatives from the Florida Council on Compulsive Gambling (“FCCG”), it appears that the prevalence rate could be significantly higher, depending on where one attempts to identify problem gamblers. The 0.4 percent – 2.0 percent rate is based on the psychology literature, much of which is based on clinical diagnoses of problem gamblers. However, as noted by Laura Letson at the FCCG, “These questions should be asked at places other than the psychologist’s office.” One may see a much higher prevalence rate if the diagnosis was attempted at non-clinical settings, such as in homeless shelters, in social service environments, or at correctional facilities. Letson suggests that under the FCCG’s analysis, based on a preliminary, two-question problem gambling screen of the arrestee population, the prevalence rate may be over 15 percent. Other FCCG data indicate that prevalence rates for adults and adolescents may be in the same range (15 percent to 18 percent).⁴³⁶

Disordered gambling is a condition which is usually diagnosed in a clinical setting. The *Diagnostic and Statistical Manual* (“DSM”), published by the American Psychiatric Association, is the standard for the diagnosis of problem/disordered gambling. The DSM-IV (1994; 2000) lists a set of 10 criteria that are indicators of disordered gambling. A person may be diagnosed as a pathological gambler if they endorse at least five of the following indicators:⁴³⁷

1. Is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)
2. Needs to gamble with increasing amounts of money in order to achieve the desired excitement
3. Has repeated unsuccessful efforts to control, cut back, or stop gambling

⁴³³ Walker, *Casinomics*, 2013, p. 111.

⁴³⁴ *Ibid*, p. 112.

⁴³⁵ Psychologists classify gambling problems into different categories, including problem gamblers, pathological gamblers, and the newest term, disordered gamblers. We do not differentiate among these different levels of severity in this overview of the impacts of gambling.

⁴³⁶ Laura Letson, Florida Council on Compulsive Gambling, phone interview, May 24, 2013.

⁴³⁷ American Psychiatric Association, *Diagnostic and Statistical Manual*, 4th edition, 2000.

4. Is restless or irritable when attempting to cut down or stop gambling
5. Gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)
6. After losing money gambling, often returns another day to get even (“chasing” one’s losses)
7. Lies to family members, therapist, or others to conceal the extent of involvement with gambling
8. Has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling
9. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling
10. Relies on others to provide money to relieve a desperate financial situation caused by gambling

In the new edition of the DSM (“DSM-5”), to be published in summer 2013, the terminology changes from “pathological gambler” to “disordered gambler,” and the eighth criterion – related to illegal acts to finance gambling – has been dropped. The diagnosis will require at least four of the nine remaining indicators.⁴³⁸

Disordered Gambling and the Proximity of Casinos

One important question for any government jurisdiction considering the expansion of legalized casinos is whether the prevalence of disordered gambling is related to the proximity of casinos. In other words, is the introduction of casinos to an area likely to increase the prevalence of disordered gambling? Several studies have examined this issue. While the odds of a person being a disordered gambler are about 1 percent, for people within 10 miles of a casino the odds increase by 90 percent (to 1.9 percent), according to one study.⁴³⁹ However, it is unclear whether an increase in this risk is the result of new people in that area developing gambling problems, or whether a casino attracts existing disordered gamblers to the area. Another study on adolescents found that the number of different forms of legal gambling in a state is related to an increase in the proportion of problem gamblers in the state.⁴⁴⁰

⁴³⁸ See Nancy M. Petry, “Editorial: Pathological Gambling and the DSM-V. *International Gambling Studies*, Volume 10, p. 113-115.

⁴³⁹ John W. Welte, et al., “The Relationship of Ecological and Geographic Factors to Gambling Behavior and Pathology,” *Journal of Gambling Studies*, Volume 20, 2004, p. 418.

⁴⁴⁰ John W. Welte, et al., “Legal Gambling Availability and Problem Gambling Among Adolescents and Young Adults,” *International Gambling Studies*, Volume 9, 2009, p. 94.

Hence, the evidence suggests that the negative impacts from casinos that are associated with disordered gambling would likely be worse in Florida if casino gambling is expanded there. Indeed, representatives from the FCCG indicate that, since 2005, help-line calls in the state have increased over 50 percent. This is during a time period in which the amount and types of legalized gambling increased dramatically in the state – namely with the introduction of racetrack casinos in South Florida and the development of two Seminole Hard Rock destination resort casinos. FCCG Executive Director Pat Fowler notes, “More than 50 percent of help-line callers identify slot machines as their primary problem.” Another 30 percent identified cards as their main problem; this has increased as no-limit poker has increased in availability.⁴⁴¹

At the same time, however, psychologists have not found significant differences in prevalence rates across jurisdictions or across time. So, even though casinos have spread across the United States, the prevalence of disordered gambling has not increased at the same rate. Since Florida already has several legal types of gambling, including tribal casinos, it is unclear how the introduction of commercial casinos would affect the prevalence of problem gambling. But if help-line call data are an indication, gambling problems would likely increase with expanded gambling in Florida.

Negative Social Impacts Associated with Casinos (and Gambling)

Social scientists have been studying the economic and social impacts of legalized gambling, particularly casino gambling, since the early 1990s. Such research was frequently cited in debate over the expansion of casinos into new states, especially when the research offered a monetary estimate of the “social costs of gambling.” As an example of the importance of this area of research, the National Gambling Impact Study Commission discussed the various social costs of gambling, and the National Research Council’s *Pathological Gambling* discusses the academic research in detail, although these resources are somewhat dated now.⁴⁴²

Among the many studies that examine the negative social impacts that are often associated with gambling in general, and casino gambling in particular, the paper by Thompson, Gazel, and Rickman represents one of the most careful analyses.⁴⁴³ These authors surveyed Gamblers Anonymous members, people who might be expected to be more likely than the general public to be diagnosed as disordered gamblers. Based on the survey responses, Thompson et al. estimate the annual social costs per disordered gambler to be around \$9,500. This amount includes the following types of social cost: employment (including lost work hours, unemployment compensation, and lost productivity and unemployment; \$2,941), bad debts

⁴⁴¹ Pat Fowler, Florida Council on Compulsive Gambling, phone interview, May 24, 2013.

⁴⁴² National Research Council, *Pathological Gambling*, 1999.

⁴⁴³ William N. Thompson, Ricardo C. Gazel, and Dan Rickman, “The Social Costs of Gambling,” *Gaming Law Review*, Volume 1, p. 81-89.

(\$1,487), civil court (\$848), criminal justice (including thefts, arrests and trials, and incarceration; \$3,498), therapy (\$361), and welfare (\$334).

There is no doubt that disordered gamblers sometimes engage in socially costly behaviors. However, such monetary social cost estimates have been criticized in the literature.⁴⁴⁴ One of the key problems with estimating the monetary value of social costs is that most disordered gamblers also have other behavioral problems, such as alcohol or drug use problems.⁴⁴⁵ Yet, most social cost studies simply attribute all of the social costs created by these individuals to the gambling problem. There is no research that successfully partitions the costs among the various behavior problems experienced by the individual.⁴⁴⁶

While it is not possible to offer an objective social cost monetary estimate without making a variety of arbitrary assumptions, it is informative to discuss the different types of problems that are most commonly associated with disordered gambling. In other words, a qualitative, rather than quantitative, discussion of social costs is more useful.

Casinos and Crime Rates

One of the most common concerns people have with the expansion of gambling is that it may cause an increase in crime rates. Such concerns are often voiced by members of the law enforcement community. For example, Sarrah Carroll of the Florida Sheriff's Association indicates that she believes there is a link between gambling and crime. Her organization is opposed to any expansion of gambling in Florida because of concerns that crime problems would be exacerbated.⁴⁴⁷ Certainly each community may have different experiences with gambling-related crime, depending on the types of gambling available and other characteristics of the community in question.

Over the past three decades numerous researchers have examined the relationship between casino gambling and crime rates. One of the most commonly cited studies is the 2006 study by Grinols and Mustard.⁴⁴⁸ These authors examined county-level crime data from 1977 through 1996. As do most studies on the subject, Grinols and Mustard focus on the FBI's *Uniform Crime Reports* Index I crimes, which include "street crimes": aggravated assault, rape, robbery, murder, larceny, burglary, and auto theft. They argue that approximately 8 percent of

⁴⁴⁴ See, for example, Douglas M. Walker and A. H. Barnett, "The Social Costs of Gambling: An Economic Perspective," *Journal of Gambling Studies*, Volume 15, 1999, p. 181-212.

⁴⁴⁵ James R. Westphal and Lera Joyce Johnson, "Multiple Co-occurring Behaviours Among Gamblers in Treatment: Implications and Assessment," *International Gambling Studies*, Volume 7, 2007, p. 73-99.

⁴⁴⁶ Douglas M. Walker, *Casinomics*, 2013, p. 178-181.

⁴⁴⁷ Sarrah Carroll, Florida Sheriff's Association, phone interview, May 23, 2013.

⁴⁴⁸ Earl Grinols and David Mustard, "Casinos, Crime, and Community Costs," *Review of Economics and Statistics*, Volume 88, 2006, p. 28-45.

casino county crime can be attributed to the existence of casinos. Several studies confirm the Grinols and Mustard results; yet others find no relationship between casinos and crime rates.

Although the Grinols and Mustard paper received a lot of attention, it has also received a significant amount of criticism because the authors calculated the crime rate in a way which overstates the impact of casinos. Crime rates should reflect the risk of an individual being victimized by crime.⁴⁴⁹ In a county with no tourism, for example, calculating the crime rate is simple; it is the number of crimes committed divided by the population at risk (or county residents). But if there is significant tourism in a county, then the crime rate should be calculated as the total number of crimes committed divided by county residents plus tourists. Since Grinols and Mustard divided crimes by county population only – and excluded tourists from their population measure – their calculations almost certainly overstate the effect of casinos on crime.

The 2010 study by Reece⁴⁵⁰ significantly improved on the Grinols and Mustard study, as Reece controlled for the number of tourists and also the number of casino customers – two critical adjustments absent in the Grinols and Mustard study. Although Reece’s analysis is much more thorough than the Grinols and Mustard analysis, he examined only Indiana. Nevertheless, his findings are an important contribution to the overall understanding of casinos and crime. In summary, Reece finds that burglaries increase in a county a few years after a casino opens. However, car thefts and aggravated assaults decreased. Increased casino volume reduces larceny, car theft, aggravated assault, and robbery.⁴⁵¹

A recent, fairly comprehensive review of the casino-crime literature shows that almost all studies that find a relationship between casinos and crime calculate the crime rate by excluding the tourists from the population at risk. Those studies that do include the tourists in the population measure find no casino effect on crime rates.⁴⁵² Given the best available evidence, it seems unlikely that the existence of casinos causes an increase in crime rates, properly calculated. There *may be* a relationship between casinos and crime, but there is no good evidence, as yet, to support such claims.

Problem Gambling and Crime

There is solid evidence that disordered gamblers are more likely than non-gamblers to engage in crime. This connection makes intuitive sense. For example, a person who has

⁴⁴⁹ Jay S. Albanese, “Casino Gambling and Crime,” testimony before the NGISC, September 10, 1998, p. 191-198. <http://govinfo.library.unt.edu/ngisc/meetings/10sept98/p230910.pdf>.

⁴⁵⁰ William S. Reece, “Casinos, Hotels, and Crime,” *Contemporary Economic Policy*, Volume 28, 2010, p. 145-161.

⁴⁵¹ Reece (2010), quoted in Douglas M. Walker, *Casinomics*, 2013, p. 212.

⁴⁵² Douglas M. Walker, “Casinos and Crime in the U.S.A.,” in Bruce Benson and Paul Zimmerman (editors), *Handbook on the Economics of Crime*, p. 488-517.

difficulty controlling his gambling may have to take drastic actions to obtain money to satisfy a gambling habit. A variety of studies that rely on Gamblers Anonymous members confirm that these individuals are more likely to commit crimes. For example, the study by Meyer and Stadler finds that 89 percent of their sample of pathological gamblers admitted to having committed at least one crime in their lifetime.⁴⁵³ This rate is much higher than for the general population.

Even when analyzing a sample of people from the general population, the link between gambling behaviors and crime seems to exist. In one study of adolescents, researchers found that individuals who indicated gambling behaviors consistent with those from the DSM were significantly more likely to indicate that they had also engaged in crime, compared to individuals who did not exhibit disordered gambling behaviors.⁴⁵⁴ However, the study also found that it was not casino gambling that is most linked to crime – rather, it was gambling on horse racing, sporting events, and card games that were found to have the link to crime.

It is difficult to predict whether or not the increased crime committed by disordered gamblers has a meaningful impact on overall crime rates, since disordered gamblers make up such a small portion of the population. Aside from that, as noted above, results from crime rate studies are inconclusive as a group. Nevertheless, the literature seems to confirm that problem gamblers are more likely to engage in crimes than non-problem gamblers.

Casinos and White-Collar Crime

Over the past two decades, there have been numerous suggestions in the academic literature and in political debate that gambling is associated with white-collar crimes, such as embezzlement, forgery and fraud. The motivation for such crimes, especially on the part of disordered gamblers, seems obvious. If one is accumulating significant losses at a casino, one way to finance such losses would be to use one's position of trust to commit a financial crime.

A link between casinos and gambling and white-collar crime has been cited in countless reports, newspaper articles, and even in the Congressional Record. A typical quotation is: "The American Insurance Institute estimates that 40 percent of white-collar crime has its root in gambling."⁴⁵⁵ The problem is, as explained by Joseph Kelly, the American Insurance Institute does not exist. The citation to this statistic often appears in anti-casino writings, some dating back to 1980, even though no one has apparently ever seen the report from which this statistic is

⁴⁵³ Gerhard Meyer and Michael A. Stadler, "Criminal Behaviour Associated With Pathological Gambling," *Journal of Gambling Studies*, Volume 15, 1999, p. 29-43.

⁴⁵⁴ Christopher Clark and Douglas M. Walker, "Are Gamblers More Likely to Commit Crimes? Evidence From a Nationally Representative Survey of U.S. Young Adults," *International Gambling Studies*, Volume 9, 2009, p. 119-134.

⁴⁵⁵ Joseph M. Kelly, "The American Insurance Institute, Like THAT Bunny, Keeps Going and Going and Going ...," *Gaming Law Review*, Volume 1, 1997, p. 209-212.

said to come.⁴⁵⁶ Nevertheless, there is likely a motivation for individuals, particularly with gambling problems, to engage in white-collar crime to finance their gambling. The FCCG's Fowler suggests that white-collar crime is a problem associated with gambling in Florida, although it has not received adequate research attention to date.⁴⁵⁷

Indeed, there has been very limited research on a link between white-collar crime and casinos (or gambling, generally). A review of the literature finds one recent study. The 2008 study by Jay Albanese specifically examines the impact of the introduction of casinos on certain white-collar crime arrests. Albanese provides national arrest data for embezzlement, forgery, and fraud, between 1988 and 2005. (He excluded juvenile arrests from his data.) Embezzlement arrests increased by about 20 percent over the period, forgery arrests increased by 19 percent, and fraud arrests decreased by about 11 percent.⁴⁵⁸

Since casino gambling, particularly by disordered gamblers, may be a motivation to engage in white-collar crimes (for example, in order to gain money with which to gamble), Albanese also examines arrest rates before and after the introduction of casinos in several markets: Atlantic City, NJ; Connecticut; Detroit, MI, and St. Louis, MO. Albanese also considers Las Vegas; even though casino gambling has existed there since the 1930s, Las Vegas grew dramatically during the 1990s. Albanese summarizes his findings on these markets:

The pre- and post-casino arrest trends in these large casino jurisdictions were remarkably consistent, but unexpected. Embezzlement arrests increased in Connecticut (and nationwide), but declined in the other casino jurisdictions. Forgery arrests dropped in the casino jurisdictions despite a general increase in forgery arrests nationwide. Fraud arrests also dropped in casino jurisdictions, reflecting nationwide trends. These results indicate that there have been mostly net decreases in average annual arrests for these white collar offenses in these large casino jurisdictions.⁴⁵⁹

There are limitations to Albanese's data. For example, his data are presented as absolute arrest counts, not arrest rates (i.e., they are not per capita arrest rates). However, given the large number of tourists that visit casinos, this omission is likely to cause an overstatement of the crime rates in casino jurisdictions. In addition the picture may look different if convictions, rather than arrests, were considered. Finally, as Albanese notes (p. 342), it is impossible to determine whether gambling was the motivation for these crimes.

Albanese focuses his discussion of the causes of white-collar crime on embezzlement, since those arrest numbers increased nationwide during the period he studied. He cites evidence from interviews of prisoners who were convicted of embezzlement. Although there is a variety

⁴⁵⁶ Ibid.

⁴⁵⁷ Pat Fowler, Florida Council on Compulsive Gambling, phone interview, May 24, 2013.

⁴⁵⁸ Jay S. Albanese, "White Collar Crimes and Casino Gambling: Looking for Empirical Links to Forgery, Embezzlement, and Fraud," *Crime, Law and Social Change*, Volume 49, 2008, p. 339.

⁴⁵⁹ Ibid., p. 341-342.

of stated causes for embezzlement, gambling is not one of the more common suggested causes. Rather, Albanese summarizes, "...females appear to embezzle primarily to keep a family or relationship together when threatened with financial problems, whereas men engage in status-seeking or status-maintaining behavior resulting in financial problems that they do not feel they can share with others."⁴⁶⁰

Although evidence from prisoner interviews may not seem entirely convincing, evidence that supports Albanese's doubt of a link between white-collar crime and casinos can be found in the fact that the DSM has dropped the diagnostic criterion that the person "has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling." This criterion is "rarely endorsed" in attempts to diagnose disordered gambling.⁴⁶¹

Political Corruption

Aside from crimes that may be committed by disordered gamblers, or others who may be seeking money to fund their gambling, historically there has been a concern about gambling and political corruption. The late US Senator Paul Simon wrote of gambling, "We have an industry ... that is growing rapidly. It is an industry...that [I think] has more of a history of involvement in corruption than any other industry."⁴⁶² Casinos may have a reputation for being "mob-run" because of Las Vegas in the early days. However, as most casinos in Las Vegas and elsewhere are now corporate owned and rigorously regulated at the state level, it raises doubt as to whether the mob has any involvement in the industry, and whether politicians systematically engage in corrupt activities with respect to the casino industry.

As with white-collar crime and street crime, there may seem to be an obvious motivation for corruption related to the gambling industry, and casinos in particular. First, the casino industry is growing very rapidly and is largely a cash business. Perhaps this would make it easier for the industry to corrupt the casino industry. More importantly, the casino industry needs politicians' consent to exist. Since state governments control almost every aspect of the casino industry perhaps the spread of casinos across the United States is due, in part, to corrupt politicians. Alternatively, there could be a link whereby, once casinos are legal and operating, they contribute to the corruption of politicians in an attempt to win favorable regulatory changes.

Spectrum has significant experience in New Jersey, where the possibility of political corruption was first addressed in the Casino Control Act of 1977, in which Sec. 138 includes the following language: "No applicant for or holder of a casino license, nor any holding, intermediary or subsidiary company thereof, nor any officer, director, casino key employee or

⁴⁶⁰ Ibid., p. 344.

⁴⁶¹ Nancy N. Petry, "Editorial: Pathological gambling and the DSM-V," *International Gambling Studies*, p. 113, Volume 10, 2010.

⁴⁶² Paul Simon, testimony in "Charge to the Commission," *National Gambling Impact Study Commission*, 1997, p. 31 <http://govinfo.library.unt.edu/ngisc/meetings/june2097/june20con.html>.

principal employee of an applicant for or holder of a casino license or of any holding, intermediary or subsidiary company thereof nor any person or agent on behalf of any such applicant, holder, company or person, shall directly or indirectly, pay or contribute any money or thing of value to any candidate for nomination or election to any public office in this State, or to any committee of any political party in this State, or to any group, committee or association organized in support of any such candidate or political party.”⁴⁶³

In our experience, that provision was designed to help ensure public confidence in the governance of gaming, and was not – nor could it have been – expected to hermetically seal the industry from politics, or vice versa. Indeed, as noted earlier, the provision did not prevent corruption, but it might have reduced it, and arguably achieved its principal goal of fostering confidence in the governance of gaming.

Since 2006, the casino/gambling industry has spent roughly \$30 million per year on lobbying federal politicians; it employs over 400 lobbyists.⁴⁶⁴ Of course, it is legal for individuals or groups to make contributions to politicians, but such figures raise questions about the industry’s influence on the government that regulates it.

It would be incredibly time-consuming to analyze individual corruption arrests to determine whether they are directly linked to casinos. However, there have been some high-profile arrests that were linked to gambling. Former Illinois governor Rod Blagojevich was convicted for a variety of crimes; one was for wire fraud in an attempt to shake-down a racetrack owner in return for the governor’s support of a 2008 law that taxes casinos 3 percent to subsidize the racetracks.⁴⁶⁵ The paper by Martz provides a description of the anecdotal evidence that purports to show a link between casinos and corruption.⁴⁶⁶

We are aware of only one empirical analysis of the link between casinos and political corruption in the United States. The recent paper by Walker and Calcagno analyzes federal corruption convictions and casino adoptions/revenues using data from 1985 to 2000. Their statistical analysis focuses on whether changes in one variable (e.g., corruption convictions) improve the prediction of the other variable (e.g., casino revenues), and vice versa. If there is such a relationship, it is called “Granger causality” in the economics literature.⁴⁶⁷

⁴⁶³ New Jersey Casino Control Act <http://www.state.nj.us/casinos/actreg/act/>.

⁴⁶⁴ Center for Responsive Politics <http://www.opensecrets.org/lobby/indusclient.php?id=N07&year=2012> (accessed May 10, 2013).

⁴⁶⁵ Associated Press, “Blagojevich Verdict: The Breakdown,” CBS Chicago.com, June 27, 2011. <http://chicago.cbslocal.com/2011/06/27/blagojevich-verdict-the-breakdown/>.

⁴⁶⁶ Stephanie A. Martz, “Legalized Gambling and Public Corruption: Removing the Incentive to Act Corruptly, or, Teaching an Old Dog New Tricks,” *Journal of Law and Politics*, p. 453-492, Volume 13, 1997.

⁴⁶⁷ Douglas M. Walker and Peter T. Calcagno, “Casinos and Political Corruption in the United States: A Granger Causality Analysis,” *Applied Economics*, in press.

The authors explain that their analysis lends little evidence to support a “culture of corruption” explanation whereby corruption leads to the introduction of casinos. Rather, they find evidence that predicted casino adoptions lead to corruption convictions. This suggests that casinos may be complicit in “regulatory capture” during the period studied. The implication is that regulators are “captured” by the industry they are supposed to regulate. Anecdotal evidence of regulatory capture by the casino industry can be seen in a variety of states. For example, several states that initially had casino loss limits (for example, \$500 per casino cruise) have since eliminated those limits. Some states which used to require casinos to be on boats no longer do.⁴⁶⁸

While such examples of regulatory changes favorable to the casino industry may be examples of regulatory capture, it should also be noted that the regulators themselves may benefit when regulations benefit the industry, as many state casino regulatory agencies are funded directly from taxes on casinos’ operations. Although the study by Walker and Calcagno is the first empirical analysis to suggest a statistical link between casinos and corruption, one could criticize the study because it does not directly link casinos or the gambling industry to particular corruption convictions. In any case, a carefully designed regulatory framework for the casino industry can be the best way of preventing any corruption associated with casinos.

Bankruptcy

Non-business bankruptcy filings increased dramatically during the 1990s, doubling between 1990 and 1998.⁴⁶⁹ Yet, the US economy did relatively well throughout this period. The trend in bankruptcies coincided with the expansion of commercial casinos outside of Nevada and New Jersey during the early 1990s, so the increased availability of casinos and spike in bankruptcies could be related. Several studies have been published that examine this relationship. Key findings of these studies are described.

Nichols et al. studied bankruptcies from 1989 through 1998 in eight casino jurisdictions and control jurisdictions without casinos. They found that personal bankruptcy rates increased in seven of the eight casino communities they studied.⁴⁷⁰ The study by de la Viña and Bernstein examined 100 counties in 36 states, from 1989 through 1994; they did not find a relationship between the introduction of casinos and county bankruptcy rates.⁴⁷¹ However, their lack of results may be because their study only went to 1994, only five years after casinos began to spread outside of Nevada and New Jersey. A more recent study found that bankruptcy rates in

⁴⁶⁸ Ibid, p. 25-26.

⁴⁶⁹ John M. Barron, Michael E. Staten, and Stephanie M. Wilshusen, “The Impact of Casino Gambling on Personal Bankruptcy Filing Rates,” *Contemporary Economic Policy*, p. 441, Volume 20, 2002.

⁴⁷⁰ Mark W. Nichols, B. Grant Stitt, and David Giacompassi, “Casino Gambling and Bankruptcy in new United States Casino Jurisdictions,” *Journal of Socio-Economics*, p. 247-261, Volume 29, 2000.

⁴⁷¹ Lynda de la Viña and David Bernstein, “The Impact of Gambling on Personal Bankruptcy Rates,” *Journal of Socio-Economics*, Volume 31, 2002, p. 503-509.

casino counties are initially higher than non-casino counties, but then casino-county rates actually fall below non-casino counties four to eight years after casinos are introduced. But rates again start to rise, and thirteen years after the introduction of casinos, bankruptcy rates in casino counties are 15 percent higher than in non-casino counties.⁴⁷²

Barron et al. examined data for over 3,000 US counties. Their results suggest that bankruptcy rates are higher closer to casinos, and that if casinos were eliminated there would be a 5 percent decline in 1998 filing rates in casino counties.⁴⁷³ Finally, the study by Garrett and Nichols indicates that individuals who visit out-of-state casinos have a 10 percent higher chance of filing for bankruptcy back in their home states, compared to individuals who did not visit out-of-state casinos.⁴⁷⁴

There have been several other journal articles that examine bankruptcy rates and their relationship to casinos. Considering those studies discussed above and the others in the literature, the majority of the evidence suggests that the existence of casinos does cause an increase in personal bankruptcy rates, especially in close proximity to casinos. It is likely that disordered gamblers are disproportionately responsible for the bankruptcy effect, as they are more likely than others to experience financial problems because of their gambling.

Drunk Driving Fatalities

Many casinos provide their patrons with free alcoholic beverages as long as they are gambling. Indeed, like bars, casinos represent an increasingly popular form of nighttime entertainment. To the extent that alcohol is relatively cheap at many casinos, then one might expect there to be a link between casinos and drunk driving.

There has not been published work that has studied the relationship between casinos and DUI arrests in the United States. However, one study examined casinos and alcohol-related traffic fatalities (“ARFAs”). The 2010 study by Cotti and Walker examined data from 1990 to 2000, a period that covers much of the recent US commercial casino expansion outside of Nevada and New Jersey. Their findings indicate that there is indeed a relationship between the existence of casinos and ARFAs.⁴⁷⁵ However, the relationship appears to be related to miles driven. In short, the study finds that ARFAs increase by 9.2 percent for casino counties with

⁴⁷² Ernie Goss, Edward A. Morse, and John Deskins, “Have Casinos Contributed to Rising Bankruptcy Rates?” *International Advances in Economic Research*, Volume 15, 2009, p. 456-469.

⁴⁷³ John M. Barron, Michael E. Staten, and Stephanie M. Wilshusen, “The Impact of Casino Gambling on Personal Bankruptcy Filing Rates,” *Contemporary Economic Policy*, Volume 20, 2002, p. 441.

⁴⁷⁴ Thomas A. Garrett and Mark W. Nichols, “Do Casinos Export Bankruptcy?” *Journal of Socio-Economics*, Volume 37, 2008, p. 1481-1494.

⁴⁷⁵ Chad D. Cotti and Douglas M. Walker, “The Impact of Casinos on Fatal Alcohol-Related Traffic Accidents in the United States,” *Journal of Health Economics*, Volume 29, 2010, p. 788-796.

average population. However, the effect declines as county population increases. Specifically, they write:

[R]ural or moderately sized counties will likely see an increase in alcohol-related fatal traffic accidents when casinos are present, but urban or greater-than-average populous counties may be expected to see a decrease in alcohol-related fatal traffic accidents when casinos are present.

This relationship is explained to be the result of “miles driven.” That is, the reason drunk driving fatalities are likely to increase in rural casino counties is that the average patron must drive more miles to get to and from the casino. This increases the likelihood that an individual will be in a traffic accident. At the same time, in urban or more populated casino counties, patrons do not have to drive as far, and they often have alternatives to driving, such as taking a cab, bus, or other public transportation. In addition, the authors suggest that urban casinos may serve as a substitute for bars and nightclubs, at which the average patron may consume more alcohol than at casinos.⁴⁷⁶

Negative Personal/Professional Impacts from Gambling

Much of the discussion in this section thus far has focused on potential negative impacts associated with gambling for which there are solid, publicly available data. Such data facilitate academic studies on the effects. Yet, a variety of negative social impacts from problem gambling are not easily quantifiable as they often occur in a person’s career or personal life. Recall that the definition provided earlier of “disordered gambling” focuses on gambling having a negative impact on a person’s career, professional relationships, and/or personal relationships. Then there are a variety of potential professional and personal problems that may result from a gambling disorder which are not well-documented in public statistics.

Nevertheless, there is solid anecdotal evidence that such problems exist. For example, the National Gambling Impact Study Commission (“NGISC”) discusses suicide, divorce, and homelessness rates, among other social problems often attributed to gambling.⁴⁷⁷ The NGISC describes a variety of individuals who testified that their lives had been shattered because of their own gambling problem or because of a family member’s or spouse’s gambling problem. Earl Grinols dedicates 21 pages in his book to reproducing newspaper headlines and quotations that provide anecdotal evidence of social problems and gambling.⁴⁷⁸ However, such cases may grab the attention of newspaper reporters and readers precisely because they are unusual or extraordinary cases.

⁴⁷⁶ Ibid, p. 795.

⁴⁷⁷ NGISC, p. 25-28.

⁴⁷⁸ Earl L. Grinols, *Gambling in America: Costs and Benefits*, p. 146-167.

One must look at academic research to determine whether a statistical link between gambling problems and these other problems exists. The National Research Council provides a review of research, prior to 1999, on many of the social impacts of gambling.⁴⁷⁹ Even then, however, the research on these issues was still relatively sparse.

As with the crime discussion from above, there is quite likely to be a distinction between the results from research that examines individuals (such as through survey research on Gamblers Anonymous members) and research that examines aggregates (such as studies on divorce or crime rates at the county- or state-level). We review some of the evidence from each of these types of studies.

The study by Thompson et al. (1997) examined data collected from a survey of 98 Gamblers Anonymous members in Wisconsin.⁴⁸⁰ They report that 21 of their respondents indicated they had lost or quit their jobs, and attributed it to gambling. Of this group, 18 reported being unemployed for an average of over 12 months. Sixty-four of the respondents indicated missing work because of gambling. Thirty-eight of the respondents had been arrested, only 14 of which were attributed directly to gambling. Among the 98 respondents, 57 had sought professional help for their gambling problem; 15 had been hospitalized. Many of the survey respondents had other behavioral problems: 30 were alcoholics; 25 were compulsive shoppers; 22 compulsive overeaters; and 14 drug addicts.

Twelve of the respondents indicated they had marriage and family problems. Among the 30 respondents who were separated or divorced, 70 percent indicated that gambling was a cause. These effects of gambling are likely to have a significant impact on children. Problem gamblers are also probably more likely than the general population to consider or commit suicide. The survey of Gamblers Anonymous members indicated that 69 respondents had thought about suicide, 59 indicated they planned how they would commit suicide, and 23 had actually attempted suicide.

The survey statistics reported by Thompson et al. are indeed startling. However, as they represent GA members, they perhaps represent the extreme end of the distribution of individuals in society with the most serious gambling problems. A variety of other studies reports on similar social impacts of disordered gambling. The National Gambling Impact Study Commission and the National Research Council⁴⁸¹ provide comprehensive discussions of many of these social impacts. The following table illustrates some problems commonly associated with disordered gambling. The table indicates the percentage of individuals among those surveyed who experience such issues, sorted by their gambling classification.

⁴⁷⁹ National Research Council, *Pathological Gambling: A Critical Review*, 1999.

⁴⁸⁰ William N. Thompson, Ricardo C. Gazel, and Dan Rickman, "The Social Costs of Gambling," *Gaming Law Review*, Volume 1, p. 81-89. Data reported in the following paragraphs are from p. 86-87.

⁴⁸¹ National Research Council, *Pathological Gambling: A Critical Review*, 1999.

Figure 48: Percentage of individuals reporting various problems associated with gambling

Problem	Non-Gamblers		Low-Risk Gamblers		At-Risk Gamblers		Problem Gamblers		Pathological Gamblers	
	Lifetime	Past Year	Lifetime	Past Year	Lifetime	Past Year	Lifetime	Past Year	Lifetime	Past Year
Health poor/fair, past year	22.8	21.0	14.0	12.3	15.7	13.2	16.3	22.6	31.1	29.6
Mentally troubled (currently) (RDD only)	10.7	14.6	15.9	17.1	26.5	28.5	42.3	24.2	41.9	66.5
Mental health tx, past year	5.1	6.9	6.8	6.3	6.4	10.1	12.8	5.4	13.3	12.9
Emotionally harmful family argument about gambling	NA	0.5	0.1	0.3	0.8	6.8	15.8	10.5	53.1	65.6
Manic symptoms, ever	NA	0.7	NA	1.6	11.3	17.6	16.8	13.4	32.5	40.1
Depressive episode (RDD only)	NA	0.1	NA	1.0	8.6	17.4	16.9	5.2	29.1	20.0
Alcohol/drug dependent, ever (RDD only)	1.1	0.9	1.3	1.8	5.6	13.3	12.4	13.9	9.9	20.0
Drug use 5+ days, past year	2.0	2.4	4.2	5.1	9.2	13.5	16.8	16.1	8.1	13.9
Any job loss, past year	2.6	4.8	3.9	3.6	5.5	2.1	10.8	0.0	13.8	25.0
Bankruptcy, ever	3.9	3.3	5.5	6.4	4.6	10.9	10.3	13.8	19.2	10.7
Arrested, ever	4.0	7.0	10.0	11.9	21.1	25.7	36.3	25.0	32.3	26.4
Incarcerated, ever (RDD only)	0.4	–	3.7	–	7.8	–	10.4	–	21.4	–

Source: National Gambling Impact Study Commission, Table 7-2, p. 7-21.

Other studies confirm the variety of personal, family, and career problems that often accompany a gambling problem. For example, the study by Shaw et al. (2007) discusses “collateral effects” of pathological gambling, including “divorce, domestic abuse, financial instability, friendship/ family loss, and the psychological and educational development of the children included in those families.”⁴⁸²

Studies that focus on disordered gamblers find that such individuals often have other behavioral problems and issues. Similar results have been found with respect to crime, although there is not clear evidence that casinos affect crime rates. There is an important distinction between “micro” studies which examine problem gamblers specifically, and “macro” studies which look at aggregate statistics. Although the studies cited above point to a variety of problems experienced by disordered gamblers and their surrounding society, these results do not always hold at an aggregate level. For example, one study examined county-level rates of suicide and divorce in eight new casino jurisdictions, comparing them to similar non-casino control jurisdictions.⁴⁸³ The results are summarized:

⁴⁸² Martha C. Shaw, et al., “The Effect of Pathological Gambling on Families, Marriages, and Children,” *CNS Spectrums: The International Journal of Neuropsychiatric Medicine*, Volume 12, 2007, p. 615-622.

⁴⁸³ Mark W. Nichols, B. Grant Stitt, and David Giacomassi, “Changes in Suicide and Divorce in New Casino Jurisdictions,” *Journal of Gambling Studies*, Volume 20, p. 391-404.

Suicide rates are not statistically different between casino and control communities. Divorce rates are lower in three casino counties, higher in one, and not statistically different in four. Overall, the results suggest no widespread, statistically significant increase in either suicide or divorce.⁴⁸⁴

These results could be interpreted as meaning that casinos do not contribute to suicide and divorce. However, since the study relies on county-level data, one may not expect statistically significant results, especially since only about 1 percent of the population is likely to have a gambling disorder.⁴⁸⁵

Despite the lack of results in macro studies of the negative impacts of gambling, jurisdictions should be aware that such problems are likely to occur, even if they affect a relatively small number of people.

NIMBY

One general concern that many people have with respect to legal gambling (and expanded gambling) is that it changes a community's "feel." Many times a person's opposition to gambling can simply be summarized as NIMBY ("not in my back yard"). For example, a casino brings with it more traffic, perhaps more crime, and a variety of other changes that may fundamentally change a community. A person may not necessarily be opposed to the activity of gambling, but they would prefer that it not be located near their home.

More generally, and with respect to Florida, as Bill Lupfer of the Florida Attractions Association noted earlier in the report, expanded gambling would damage "the Florida brand" of wholesome, family-oriented tourism.

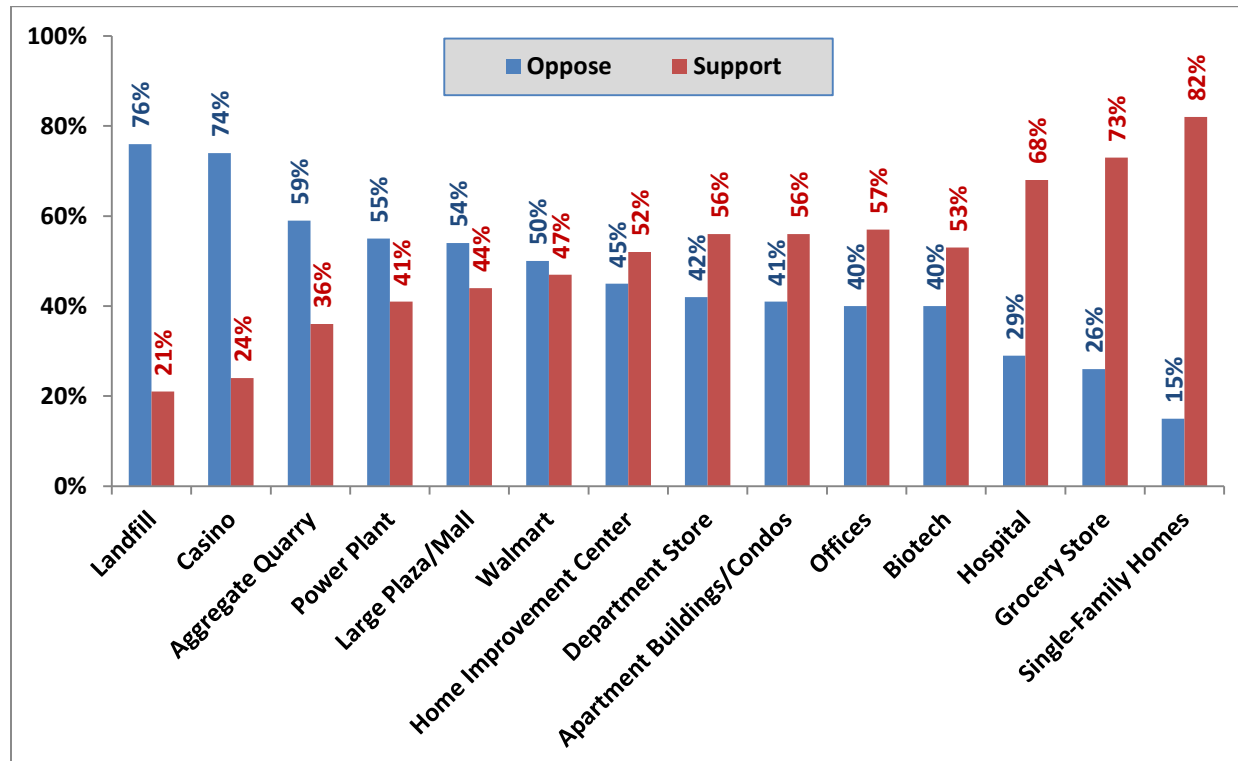
According to one poll, most Americans do not support having a casino in their own community. The Saint Consulting Group, a Hingham, MA, consultancy that specializes in land-use politics, every year or two conducts a nationwide poll (The Saint Index) asking Americans whether they would support a certain type of facility or land use in their community. "Casino" routinely ranks among the second- or third-most opposed category. This stands in contrast to the American Gaming Association's annual poll, which in 2012 showed that 85 percent of Americans say that casino gambling is acceptable for themselves or others⁴⁸⁶ – demonstrating the NIMBY factor. The following chart shows the results of the most recent Saint Index:

⁴⁸⁴ Ibid, p. 391.

⁴⁸⁵ However, this is not necessarily to say that divorce and suicide only happen among the population of disordered gamblers.

⁴⁸⁶ *2013 State of the States 2013*, p. 32.

Figure 49: Saint Index 2011: Support and opposition to land use in respondent's own community, nationwide



Source: The Saint Consulting Group

Florida Council on Compulsive Gambling: Overview of Issues, Concerns

As part of its research, Spectrum asked Pat Fowler, executive director of the Florida Council on Compulsive Gambling, to detail the issues that are of particular concern to her organization and to the constituents whom the council serves. Spectrum recognizes that the council – like its counterparts in other states – provides a vital service that would largely go unattended if such a non-profit organization did not exist. As a resource, the council's value will increase in tandem with any potential expansion of gaming. Fowler noted, in a memo to Spectrum, that:

In 2011, the State nearly eliminated all prevention, education and outreach monies for problem gambling related programming. Moreover, State government withheld monies collected from pari-mutuel facilities with slot machines (i.e. \$250,000 per facility), statutorily earmarked for compulsive gambling programming, which was competitively awarded (per an RFP) to the Florida Council on Compulsive Gambling.

Overall, the role of government within the gambling equation has grown exponentially, has significantly impacted upon expansion, has resulted in social impacts, and has affected the public's perception of gambling, and associated challenges.

In-state research among adolescents, college-age students, adults and senior citizens all confirm that gambling is a problem for a significant percentage of these populations.

They also confirm that problem gambling has social and legal consequences and exists in all groups of society, appears in all social strata and socio-economic levels, as well as across race and ethnic groups. The same is true for incarcerated juveniles in Florida, as well as among adult arrestees, in which a significant percentage suffering from gambling problems are engaging in illegal activities.⁴⁸⁷

In response to Spectrum's request, the Council provided the following synopsis of issues that its leadership believes needs to be addressed. The following list of challenges and solutions is provided verbatim from Fowler's memorandum:

Challenge:

Florida currently lacks a clear and consistent State policy on gambling that addresses both regulatory and public health issues.

Solutions:

Support legislation and other public policy initiatives that recognize gambling as a public health issue and respond to the link between problem gambling and comorbidity, as well as social impacts.

Design State policy that addresses the regulatory, public health and related aspects of gambling.

Influence public policy on the requirement for the gambling industry to more formally and consistently address responsible gambling.

Collect and share utilization of data across State and community-based organizations related to gambling.

Challenge:

Problem gambling is not currently viewed as a public health issue and is not overseen by a designated entity at the State level. Moreover, while the FCCG has served as the statewide advocate on issues related to problem gambling prevention, education, treatment, and research for nearly 15 years, the State Legislature has never authorized a governmental agency to address problem gambling from a public health and harm reduction perspective. Equally important, the two State agencies deemed responsible for oversight and regulatory issues relating to gambling operations in the State are also the designated entities to oversee initiatives and industry programming relating to problem gambling (i.e. Florida Lottery and the Florida Department of Business & Professional Regulation).

Solutions:

Explore the assignment of responsibility for problem gambling as a public health issue, and for comprehensive policy analysis related to problem gambling.

Provide ongoing information and support regarding the benefits of designating one organization with responsibility for problem gambling as a public health issue.

⁴⁸⁷ Memorandum from Pat Fowler to Spectrum Gaming Group, June 27, 2013.

Challenge:

Although Florida State government has and continues to promote gambling expansion, at no time has it ever established a dedicated fund for problem and compulsive gambling prevention, education, research, and treatment.

(Note: Existing State funding to the FCCG is:

- Limited in scope,
- Substantially reduced from years past
- Was lowered despite enabling legislative requirements
- Provides no support for treatment.

In fact, this absence of State-funded treatment has necessitated that the FCCG identify another funding source willing to subsidize free treatment in instances when compulsive gamblers or concerned persons lack adequate insurance or haven't an ability to pay. However, if the State is going to promote and support gambling expansion, it needs to provide adequate supports for those negatively impacted.)

Solution:

Legislatively establish a dedicated fund for problem gambling prevention, education, research, and treatment, based upon a percentage of State revenues generated by Florida based gaming operations. This will resolve existing and longstanding voids within the problem gambling community and result in appropriate widespread awareness and treatment for Florida residents.

Challenge:

Currently, private and managed care providers do not furnish appropriate, consistent and/or comprehensive insurance coverage for pathological diagnoses in problem gamblers, or for persons adversely affected by gambling. They also do not facilitate treatment for problem gambling for persons presenting with co-morbid psychiatric illnesses.

Solution:

As the American Psychiatric Association's criteria for pathological gambling has been reclassified as an addictive disorder (i.e. DSM-V due to be issued shortly), the Legislature could take steps requiring insurance providers to furnish coverage for persons with positive diagnoses or for those adversely affected (e.g. family members and other loved ones).

Challenge:

Few substance abuse, mental health, medical, and other health care professionals ask clients about their gambling habits. As a result, the early signs of a gambling problem are overlooked, particularly in conjunction with other addictive, mental health or medical conditions. So, while nearly all patients presenting in medical offices, drug and treatment programs, mental health facilities, emergency rooms, and elsewhere are subject to screening for tobacco, alcohol and other substances, they are not preliminarily screened for gambling. Yet, more than one-third of compulsive gamblers in treatment

experience other addictive or mental health disorders, and a significant percentage suffer from an array of medical conditions.

Solution:

Educate a broad array of existing health care professionals and institute programming within medical universities and other academic institutions to assure awareness and competency to systematically assess for gambling related difficulties.

Challenge:

Problem gamblers in Florida do not currently have access to therapeutic justice as is the case for those experiencing substance abuse, mental health and domestic violence difficulties. In particular, Florida does not currently have a system that identifies those with gambling problems at all levels within law enforcement and criminal justice facilities. As a result, problem gamblers are not identified nor are the protocols for sentencing, release or reintegration into communities considering the nuances directly impacting this population and/or the potential ramifications to families, communities and the State as a whole.

Solutions:

Develop screening mechanisms to identify problem gambling at appropriate points, from the initial investigation through arrest, booking to arraignment, and trial and sentencing.

Train law enforcement personnel, defense and prosecuting attorneys, and Judges on screening, identifying and responding to problem gamblers, both in traditional and therapeutic justice settings. (The FCCG's *A Chance for Change Program: A Guide for Legal, Criminal Justice and Court Professionals*, funded by Florida State government, has already been developed. Yet, these professionals and organizations are not required to utilize.)

Encourage existing drug, mental health and domestic violence courts to screen current participants for problem gambling and establish a process for those who fall outside the scope.

Develop gambling courts, like the model program in Amherst, New York, in jurisdictions where the level of problem gambling related cases warrant such specialized approach.

Develop statewide resource networks for Judges and probation officers to support offender access to education and treatment.

Establish Gamblers Anonymous groups in prisons and jails, and increase the number of certified gambling counselors who are available to work with the criminal justice system.

Utilize the Florida Council on Compulsive Gambling programs for the juvenile justice population and for the offending population in jails and prisons.

Build evaluation mechanisms into all programs and expansion efforts. (Even when the FCCG provides free training and programming within criminal justice facilities, and supplies self-help materials for inmates, requests for outcome data by these institutions is not forthcoming.)

Challenge:

Public school students are not being exposed to programming related to problem gambling despite research sponsored by the FCCG based upon the findings from the Florida Department of Children and Families' Youth Substance Abuse Survey, revealing that more than half the students reported gambling in the past year, 13% have done so once a month or more, and 4% bet weekly. In addition, 15 % admitted to having arguments with family or friends due to gambling (which is a problem gambling indicator). The FCCG's independent study, Gambling Among Florida Middle and High School Students, revealed (per the DCF Youth Survey) that gamblers are over two times more likely than non-gamblers to be drunk or high at school and nearly six times more likely to "carry a gun" during the past year.

Furthermore, although the Florida Departments of Lottery, Education, Health, Office of Drug Control, and Children and Families all supported the FCCG's curriculum for the public school system, to date, nothing has been required. (Note: A joint letter from these organizations were sent to every school superintendent but no action has been systematically taken. Since this time, the FCCG has also devised programming for elementary school (Smart Choices) and college students (SAGA – Students Against Gambling Addiction).

Solution:

Require the use of problem gambling programming as a natural extension to existing dialogue about tobacco, alcohol and substance use, abuse, prevention and treatment.

Challenge:

Responsible gaming programs by Florida gaming operators vary, as do practices regarding self-exclusion. Presently, not all gambling venues implement responsible gaming programs and in other instances where protocols are established, they often reflect bare minimum provisions which are deficient in providing necessary training to employees, safeguards to protect the patron population, and/or strategies for aiding a person in need of assistance for a gambling problem. And while there are establishments adhering to high standards, the State lacks consistency throughout the industry.

Further, self-exclusion is intended to preclude patrons from returning to a facility for a set period of time, up to a lifetime. However, it is not working effectively throughout the State, lacks uniformity statewide, allows excluded persons to return to excluded properties because facility employees are not enforcing provisions (which is also a liability for the gaming operator), and requires that these patrons travel to different gambling facilities to self-exclude versus implementing a statewide clearinghouse).

Solution:

Legislatively mandate implementation of a comprehensive responsible gaming program that requires minimum standards, assures adequate employee training, conspicuous disclosure of the statewide helpline, and develops and oversees a statewide self-exclusion

registry that reflects the spirit of self-exclusion and serves as a disincentive for patrons to return to a property or to attempt to gamble elsewhere.⁴⁸⁸

b. Positive Impacts

Legalized gambling has expanded in the United States quite dramatically since the 1960s. The lottery was introduced in New Hampshire in 1964, and now 43 states have a state-operated lottery. Horse and greyhound racing are also very common. Casinos, which began to spread outside of Nevada and New Jersey in the late 1980s, are now legal in 42 states.

State governments and voters tend to approve the legalization of commercial casinos for economic reasons. That is they expect significant economic benefits from the introduction of casinos. These benefits may include increased employment and an increase in average wages, economic growth (i.e., increases in per capita income), and increased tax revenues. These effects are discussed in Chapter III; here we provide a brief introduction to the literature on these economic benefits, particularly from casinos.

Employment and Wages

The casino industry promotes itself by publicizing employment data. Casinos can generate employment through the construction of their facilities and then through their day-to-day operations. The casino industry is very labor-intensive. As an example of this, the American Gaming Association's *State of the State* annual report lists the number of casino employees in each state with commercial casinos.⁴⁸⁹ The report also lists "casino employee wages" as a state-level aggregate. There is certainly an effect on local labor markets when a new casino is built and operating. In general, one can think of the new casino as causing an increase in the demand for labor. As a result average wages should increase as employment increases.

However, casino critics often argue that casino jobs are low-quality, low-paying jobs. There are no academic studies of which we are aware that confirm this contention. Perhaps the most comprehensive, best analysis of the labor market effects of casinos was written by Chad Cotti in 2008.⁴⁹⁰ Cotti analyzes US county-level data, comparing counties with and without a casino. He finds that casino counties see an increase in employment after a casino opens. Further, his analysis shows that casinos create modest benefits to both employment and wages, but that the employment growth is negatively related to county population. (That is, there is a smaller impact on employment growth in more populous casino counties.)

⁴⁸⁸ Ibid.

⁴⁸⁹ 2013 *State of the States*, p. 12-22.

⁴⁹⁰ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 17-41.

Since Cotti's analysis compares all casino counties to all non-casino counties, and because he controls for other economic variables in his analysis, we can be confident that his analysis isolates the impact of casinos. What his analysis does not show is the net effect of casinos compared to some other specific non-casino industry. In order to analyze the effects of gambling in Florida, jurisdictions in which casinos or pari-mutuels are operating should be compared to other non-gaming jurisdictions, while controlling for other economic variables.

These results should not be surprising, as a casino represents new economic activity in a local economy. As with other new businesses, one should expect that a new casino will create jobs. However, measuring the impact of casinos on employment requires a consideration of the *net impact*. That is, simply because a casino employs 1,000 workers does not necessarily mean that the casino created 1,000 new jobs. Some jobs may have been lost in other competing industries. Nevertheless, the available empirical evidence suggests that casinos have a positive impact on the labor markets in which they operate.

Economic Growth⁴⁹¹

The casino industry does not typically promote itself as generating economic growth. This is probably because, as a political matter, how a casino would generate economic growth is a more abstract concept than, say, the creation of jobs. However, politicians often claim that casinos can be used as a tool for redevelopment.

Casinos can lead to economic growth simply because they represent new economic activity in a region. Joseph Schumpeter discussed "the introduction of a new good" as one possible source of economic development.⁴⁹² This proposition has been tested with respect to casinos.

The most recent evidence on the issue uses Granger causality analysis. Basically, what this statistical test does is determine whether the use of one variable (casino revenues) can improve the prediction of another variable (per capita income). If it can, then it is said to "Granger cause" the other variable. This is as close as economics can come to showing "causality" among two variables. The Granger causality analysis uses data from US states with commercial casinos, from 1990 through 2010. The analysis indicates strong statistical evidence that casino revenues do Granger cause economic growth.⁴⁹³

If we step back and consider what causes economic growth (increases in per capita income) to occur, it boils down to mutually beneficial transactions. That is, whenever a market

⁴⁹¹ This section draws from Douglas M. Walker, *Casinomics*, 2013, chapters 2-6.

⁴⁹² Joseph A. Schumpeter, *The Theory of Economic Development*, 1933, p. 66.

⁴⁹³ Walker, *Casinomics*, 2013), p. 54-56. It should be noted that a similar study performed in 2007 did not find a Granger causal relationship between casinos and economic growth. However, as noted above, the most recent evidence suggests there is such a relationship.

transaction occurs between buyer and seller, both parties are expecting to benefit as a result of the transaction; otherwise they would not agree to trade.

The benefits of such transactions can be easily seen, especially for the sellers. Profit is simply the difference between the selling price and cost of production. This is the net benefit to the seller, which is the amount of money that remains after paying for the inputs to production. On the buyer's side of the market, there is a similar benefit from the transaction, but it is a little more abstract. Consumers typically receive more in benefits from consumption than they had to pay for it. For example, if a person is so thirsty that he would be willing to pay \$5 for a soda, but he has to pay only \$2 at the neighborhood grocery, he receives a \$3 net benefit from the transaction. In a sense, the consumer has a "profit" analogous to the seller's profit.

Any business that provides a good or service for which people are willing to pay helps to foster this process of mutually beneficial exchange. This is simply economic activity, which is the basis of economic growth. It matters little what type of business it is, as long as the customers receive benefits from the product at least as great as the amount they must pay.

As new businesses are formed, workers must be hired to produce the goods and services. This creates increased competition for workers; that is, there is greater demand for workers, and wages are likely to be pushed up as a result. The new firm must offer a salary and/or benefits in excess of workers' next-best option; otherwise the new firm will not be able to find suitable employees. It is possible that the new firm would simply hire individuals who are currently unemployed. In this case, the new job still presumably represents an improvement over the unemployed worker's current situation.

Tax Revenues

Legalized gambling, in general, and casinos, in particular, can have a significant impact on state government budgets. Yet, the effect is not as large as many observers believe. In 2004, legalized gambling accounted for less than 2 percent of state revenues in most states. In Nevada, casino taxes represented 10.4 percent of state revenues. In Florida, the lottery represented about 1.7 percent of state government revenues during 2004.⁴⁹⁴ (We discuss this in more detail in Chapter III[A][2].)

Although legalized gambling is usually taxed at relatively high rates, this does not necessarily mean that the existence of a gambling industry necessarily results in a net increase of state tax revenues. For example, if there is a large "substitution effect"⁴⁹⁵ away from other consumption, legalized gambling could actually result in a decrease in tax revenues. This result is unlikely in most jurisdictions, however, since tax rates on gambling are typically much higher than tax rates on other goods and services. For example, the "lottery tax" is about 40 percent.

⁴⁹⁴ Ibid, p. 68.

⁴⁹⁵ The substitution effect is discussed in more detail in Chapter II(G)(5).

The effective tax rate on gross casino revenue ranges from 7 percent in Nevada to over 50 percent in several states.

Several researchers have examined the impact of legalized casinos and lotteries on state government revenues. For example, Siegel and Anders (1999) examine how Missouri county sales tax revenues were affected by the introduction of riverboat casinos.⁴⁹⁶ They studied 1994-96 data, and found that a 10 percent increase in gambling tax revenue leads to about a 4 percent decrease in taxes from other amusement and recreation sources. The study by Borg et al. (1993) found that \$1 in lottery revenue has a cost of 15-23 cents in other types of government revenue.⁴⁹⁷ However, the lottery still leads to a net increase in state tax receipts; the “substitution effect” from the lottery is not very great.

The study by Walker and Jackson (2011) is probably the most comprehensive tax study in the United States, to date.⁴⁹⁸ They found statistical evidence that lotteries do lead to an increase in state net tax receipts, but that the positive effect diminishes as sales increase. Their casino result was interesting, that casinos have a mildly negative impact on state tax receipts. However, their analysis also finds a positive impact on state tax revenues from increases in per capita income (i.e., economic growth) and hotel employees (as a proxy for tourism). If casinos generate economic growth and are a significant component of a state’s tourism sector, then casinos may still have a positive impact on state-level tax receipts. So, although their analysis suggests that the direct effect of casinos on taxes is probably not positive, the overall impact of casinos may be positive when the economic growth and tourism effects of casinos are accounted for.⁴⁹⁹

4. Gambling-Specific vs. Non-Gambling Impacts (Job Creation and Wage Changes)

For any of the impacts discussed in the previous section, understanding the specific effects of gambling is more complicated than it may initially seem. This is because the relevant comparison for understanding the changes in society caused by gambling is not just between the situations before and after gambling is introduced. Rather, the relevant comparison is between the situation with gambling and *what otherwise would have happened*, called the “counterfactual.”

⁴⁹⁶ Donald Siegel and Gary Anders, “Public Policy and the Displacement Effects of Casinos: A Case Study of Riverboat Gambling in Missouri,” *Journal of Gambling Studies*, Volume 15, 1999, p. 105-121.

⁴⁹⁷ Mary Borg, Paul Mason, and Stephen Shapiro, “The Cross Effects of Lottery Taxes on Alternative State Tax Revenue,” *Public Finance Quarterly*, Volume 21, 1993, p. 123-140.

⁴⁹⁸ Douglas M. Walker and John D. Jackson, “The Effect of Legalized Gambling on State Government Revenue,” *Contemporary Economic Policy*, Volume 29, 2011, p. 101-114.

⁴⁹⁹ Walker, *Casinomics*, p. 84.

Consider an example in which there is a single plot of vacant land in a city, and the land owner is deciding whether to allow a casino or a shopping mall to be built. Let's suppose the casino is eventually built. Then there will be employment and wage effects, for example, resulting from the building and opening of the casino. The jobs created by the casino, the wages paid, and taxes paid will likely be reported as the effect of the casino on the local/regional economy. The reported benefits of the casino are those compared to the situation prior to the casino being built. But this assumes that if the casino had not been built, nothing else would have been. But in our scenario, a shopping mall would have been built. Then to determine the net impact of a new casino, the effects of the casino should be compared to what would have likely happened had the shopping mall been built instead.

For the practical analysis of the impacts of casinos, it is difficult to always know what would have otherwise happened. One way of isolating the impact of casinos is to compare the situation in casino communities with those in non-casino communities. As an analysis of aggregates, this type of analysis can isolate the marginal impact of casinos, as long as other variables are controlled for in the analysis.

Perhaps more importantly, in considering the impacts of casinos, it is important to distinguish those effects that are specific to the nature of gambling (such as crime committed by problem gamblers), and those that also result from a casino, but are simply economic impacts caused by a new firm/industry entering a local economy.

By way of example, if wages increase in a community because some of its previously unemployed and under-employed adults are working at a casino, that would increase spending power in that region. That increased spending power could potentially result in increased investment by non-gaming businesses.

Hypothetically, such investments could include, say, a regional supermarket chain or a national pharmacy outlet in an area that previously did not warrant such investments. This economic growth would be casino-related, but it is not the result of gaming, in particular. Alternatively, consider if a local food store or local pharmacy is adversely impacted and hypothetically goes out of business, it is clearly an impact of the casino. But it is not necessarily gaming-related, but is rather related to general economic growth. Moreover, such an impact is adverse to that pharmacy owner, but may not be adverse to the community.

Similarly, if a casino raises the prevailing wage in an area, particularly for unskilled or semi-skilled work, that could have an adverse impact on a number of small businesses, such as small hotels, restaurants or fast-food franchises. Some may find that they cannot afford to pay the prevailing wage rate and still be profitable. That is an impact of casinos, but is not related to the specific nature of gambling, nor is it clear whether that is adverse or beneficial to the larger community.

Historically, Atlantic City and the Miami region, particularly Miami Beach, have had much in common, starting with their histories as East Coast tourist destinations. At various

times, both endured economic downturns and experienced rebounds – sometimes with the same results – but clearly the catalysts were different. Atlantic City’s economic catalyst was the legalization of casinos, while Miami’s rebound has had multiple catalysts. Still, some of the same effects can be detected, as noted in a 2012 blog:

There is a flip-side to Miami's rebound. While the super-rich are buying, locals continue to suffer. Wages and income levels are low, and the metro has a high level of income inequality. Miami's housing market and broader economy remains highly uneven and divided. While South Beach and the downtown corridor may be booming, the area inland is rife with housing misery, foreclosures and homelessness. The economic and social distance between the global super-rich and suffering locals is substantial and growing.⁵⁰⁰

Atlantic City clearly offers parallels, as noted in this excerpt from *Hostage to Fortune: Atlantic City and Casino Gambling*:

In the pre-casino world, Atlantic Avenue was Main Street USA, where the appliance dealer knew the insurance broker and both knew the barber and the shoe salesman. George Babbitt would have been quite at home in that Atlantic City.

What casino gambling did to that world was turn it upside down by injecting the world of Wharton econometrics and advanced marketing techniques into its major arteries.

Prior to casinos, the hotels and utilities, along with a few other companies ... were the only employers of more than a handful of people.

Before gambling became a component in the economy, all the workers in the region who bore the title of vice president could have squeezed into the laundry room of the Marlborough-Blenheim hotel.

Now, the Marlborough-Blenheim is gone, and Atlantic City has a banquet room full of vice presidents – real vice presidents who grew up in a world of competition. Now, they manage big banks and casino firms and national drug store chains, and they often outclass and outdistance their local counterparts.

Most of the fast-food outlets and the new drug stores and appliance dealers opened in the suburbs. To the city came new law offices and new bank branches and other businesses that would likely not have considered Atlantic City as an ideal location in its pre-casino days have opened up. ...

There are only so many ways to spend or save a single dollar, and the brokerage firms and the banks, and the haberdasheries, and the restaurants are in competition with each other for that dollar.

The available outlets for the dollars, it seems, expanded as rapidly as the supply of dollars.⁵⁰¹

⁵⁰⁰ Richard Florida, "Why Miami's Real Estate is Booming Again," *The Atlantic Cities*, March 6, 2012 <http://www.theatlanticcities.com/jobs-and-economy/2012/03/why-miamis-real-estate-booming-again/1396/>

⁵⁰¹ Michael Pollock, *Hostage to Fortune: Atlantic City and Casino Gambling*, 1987, p. 160-161.

The economic patterns are the same, but the causes – and arguably any potential solutions – would be different, yet it must be noted that, while the presence of casinos was the proximate cause of Atlantic City’s disruption, the nature of this industry has no particular relevance to that disruption.

5. The Substitution Effect

The introduction or expansion of legalized gambling, in particular casino gambling, raises a variety of concerns. Although casinos are often introduced in order to raise tax revenues, create jobs, and spur economic development, many observers have a concern for the potential “substitution effect” of casinos. That is, they are concerned that the expenditures at the new casino(s) will be redirected from other local or regional businesses, with the end result that the casinos have no real net benefit on the local economy. As an example, a quick review of “Stop Predatory Gambling” shows a variety of concerns about the casino industry’s impacts on other industries.⁵⁰²

Fundamentally, the substitution effect is not unique to the casino industry. Indeed, anytime any new business opens, there is the potential that an addition to the local economy will be harmful to incumbent firms and industries. This is because the substitution effect is essentially synonymous with market competition. As such, from an economic perspective, the substitution effect is not necessarily a cause for concern. Casinos compete for a share of discretionary incomes within their respective markets, as would be expected from any segment of the entertainment or leisure industries. When adults elect to visit a casino, rather than the theater or a museum, the casino wins and the alternative loses. Quite often, however, the reverse is true – and the number of precise alternatives competing for a share of discretionary spending is so vast, even in smaller markets, that it would defy any efforts to track precise winners and losers.

Such efforts are further complicated because, not only are there many options for discretionary dollars, we point out that overall discretionary spending also competes against savings. A dollar saved is a dollar not spent, and vice versa.

Notably, Spectrum suggests there is a potential negative correlation between the savings rate and gaming spending. For example, in 2006, a pre-recession period that was at or near the high-water mark for gaming revenue in both Atlantic City and Nevada, the national savings rate had sunk to a seven-decade low, as reported in early 2007 in *The New York Times*:

Americans once again spent everything they made and then some last year, pushing the personal savings rate to the lowest level since the Great Depression more than seven decades ago.

⁵⁰² Stop Predatory Gambling <http://stoppredatorygambling.org/blog/category/research-center/economic-impacts/> (accessed June 13, 2013)

The Commerce Department reported ... that the savings rate for all of 2006 was a negative 1 percent, meaning that not only did people spend all the money they earned but they also dipped into savings or increased borrowing to pay for purchases.

The 2006 figure was lower than a negative 0.4 percent in 2005 and was the poorest showing since a negative 1.5 percent savings rate in 1933 during the Great Depression.⁵⁰³

Notably, that original estimate of a negative savings rate was since revised by the US Commerce Department, taking it out of negative territory. Yet the principle that low savings equates to increased disposable income, which benefits certain leisure industries, remains unchanged. The Federal Reserve Bank of New York published the following in 2007:

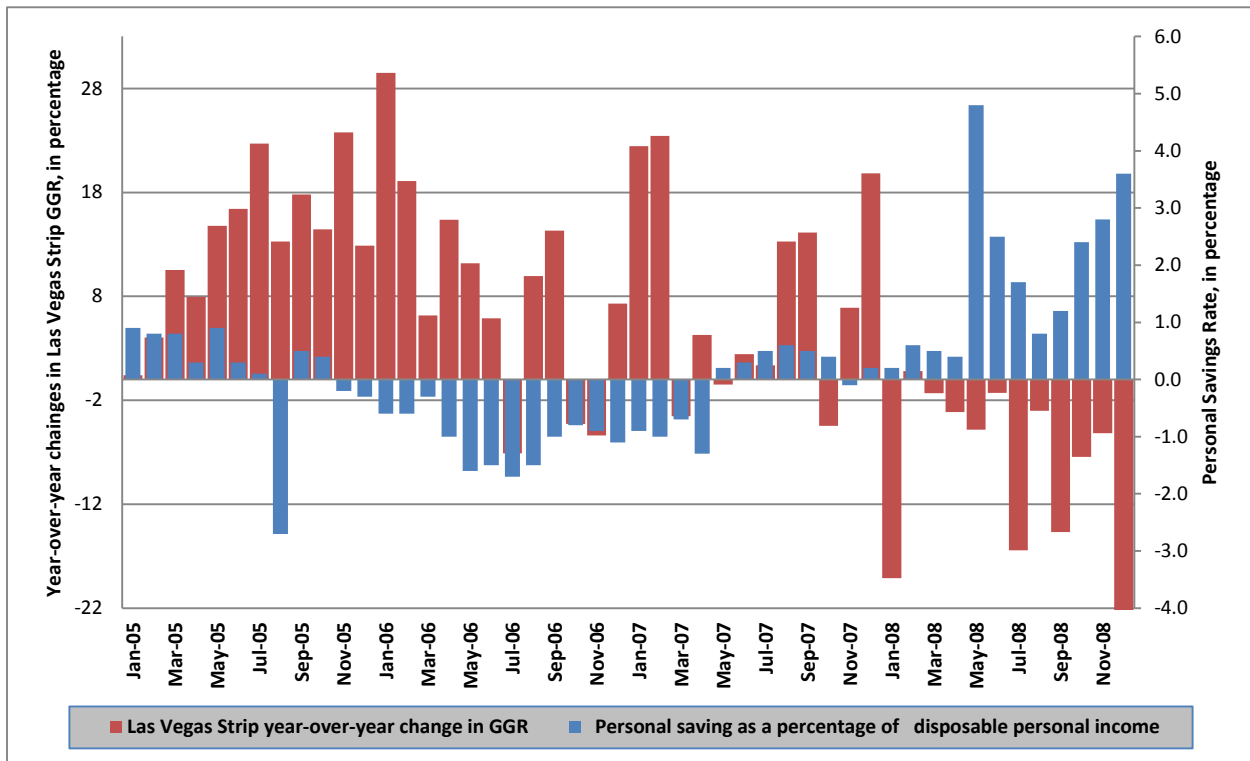
By definition, personal saving is the difference between actual current-dollar after-tax (disposable) income and current-dollar spending. Many have observed that increases in wealth (assets such as stocks and homes, less debt) relative to disposable income, both over the last generation and during the more recent rise, could have worked to boost spending relative to income and reduced the personal saving rate. This is especially true to the extent that these rises in wealth are linked to increases in expected future income, thus elevating permanent income relative to disposable income.⁵⁰⁴

Our analysis and experience suggests that the success of gaming in destination markets such as Las Vegas during periods of low savings is not coincidental. This was generally a period in which both the stock and housing markets were robust, creating a general feeling of well-being in which household net worth was increasing by itself, without the need for additional savings, and much of that increased spending – the flip side of decreased savings – benefited the casino industry, as evidenced in the following chart, which tracks data in Las Vegas through the period of low savings, right through the first, most traumatic months of the Great Recession:

⁵⁰³ "U.S. savings rate sinks to lowest since Great Depression," *New York Times*, February 1, 2007 <http://www.nytimes.com/2007/02/01/business/worldbusiness/01iht-save.4436274.html> .

⁵⁰⁴ Charles Steindel, "How Worrisome Is a Negative Savings Rate?" Federal Reserve Bank of New York, May 2007 http://www.newyorkfed.org/research/current_issues/ci13-4/ci13-4.html.

Figure 50: Personal saving as a percentage of disposable personal income vs. Las Vegas Strip Revenue



Source: Nevada Gaming Control Board, U.S. Department of Commerce

As the chart shows, an increase in the savings rate shrinks the pie of discretionary dollars, which affects the gaming industry and, presumably, other leisure industries as well, further complicating any analysis regarding substitution. Spectrum’s 2008 report for the Commonwealth of Massachusetts noted the following:

We note a very important point that was articulated rather well by Michael E. Porter who makes the point that substitution is an omnipresent issue that must be viewed in a much larger context:

‘Substitutes are always present, but they are easy to overlook because they may appear to be very different from the industry’s product: To someone searching for a Father’s Day gift, neckties and power tools may be substitutes. It is a substitute to do without, to purchase a used product rather than a new one, or to do it yourself (bring the service or product in-house).’⁵⁰⁵

With that in mind, we caution that any analysis of the substitution effect defies simplification. If a casual dining establishment loses customers to casino restaurants, it is easy to identify a competitive culprit. But what if patrons of high-end restaurants decide to alter their spending patterns, and shift more dollars to casual restaurants to free up more discretionary income to visit a spa at a destination casino. Who benefits? Who

⁵⁰⁵ “The Five Competitive Forces that Shape Strategy,” by Michael E. Porter, *Harvard Business Review*, January 2008, p. 84.

suffers? What if income levels rise in a community, thus allowing more households to spend less money at supermarkets to prepare home-cooked meals while they increase spending at area restaurants? Again, in such situations, it is difficult to identify the competition.⁵⁰⁶

Casino advocates might argue that casinos should not be treated differently than other businesses; as long as they generate a profit, it implies the casino is satisfying the wants of consumers and is a “productive” industry. Indeed, to the extent to which consumers redirect their expenditures away from other industries to casinos, this is an indication that the casino’s product is of higher value than alternative products; otherwise – according to such economic logic – consumers would not have changed their spending patterns. Two exceptions to this may be argued:

- To some extent, casinos derive a portion of their revenues from problem or disordered gamblers, who do not really exercise free choice if they have a gambling problem.
- Casino licensure is largely viewed as a privilege that often comes with some level of exclusivity. As such, casinos have a concomitant obligation to act in the public interest, which can translate into policies that minimize substitution and focus more on attracting business from outside the region or state.

There have been a few academic papers that have addressed the substitution effect, either directly or in a round-about way. Figure 51 summarizes some of these studies. Most of the studies examine data from the 1990s.

⁵⁰⁶ Spectrum Gaming Group, *Comprehensive Analysis: Projecting and Preparing for Potential Impact of Expanded Gaming on Commonwealth of Massachusetts*, p. 155, August 1, 2008
<http://www.mass.gov/hed/docs/eohed/ma-gaming-analysis-final.pdf>.

Figure 51: Review of literature on interindustry relationships

Paper	Years	States/ counties	Findings ^a
Anders, Siegel, and Yacoub ⁵⁰⁷	1990–96	1 county (AZ)	Indian casinos harm other entertainment
Elliot and Navin ⁵⁰⁸	1989–95	All states	Casinos and pari-mutuels harm lotteries
Kearney ⁵⁰⁹	1982–98	All states	Lotteries do not harm other forms of gambling
Mobilia ⁵¹⁰	1972–86	All racing states	Lotteries harm horse and dog racing
Popp and Stehwien ⁵¹¹	1990–97	33 counties (NM)	Indian casinos harm other entertainment
Ray ⁵¹²	1991–98	All dog racing states	Horse racing and casinos harm dog racing
Siegel and Anders ⁵¹³	1994–96	1 state (MO)	Casinos harm other entertainment
Siegel and Anders ⁵¹⁴	1993–98	1 state (AZ)	Slots harm the lottery; horse and dog racing do not affect the lottery
Thalheimer and Ali ⁵¹⁵	1960–87	3 tracks (OH,KY)	Lottery harms horse racing

Source: Douglas M. Walker, *Casinonomics* (New York: Springer, 2013), p. 236.

Note: ^a “Other entertainment” refers to non-gambling industries, such as restaurants, hotels, and bars.

The 2008 paper by Walker and Jackson is the most comprehensive study as of on gambling inter-industry relationships.⁵¹⁶ They studied data on all states for 1985-2000. Their results indicate that casinos and lotteries are substitutes, that lotteries complement pari-mutuel racing (and vice-versa), and that horse racing and casinos are complementary. Their inter-

⁵⁰⁷ Gary Anders, Donald Siegel, and Munther Yacoub, “Does Indian Casino Gambling Reduce State Revenues? Evidence from Arizona,” *Contemporary Economic Policy*, Volume 16, 1998, p. 347-355.

⁵⁰⁸ Donald Elliott and John C. Navin, “Has Riverboat Gambling Reduced State Lottery Revenue?” *Public Finance Review*, Volume 30, 2002, p. 235-247.

⁵⁰⁹ Melissa S. Kearney, “State Lotteries and Consumer Behavior,” *Journal of Public Economics*, Volume 89, 2005, p. 2269-2299.

⁵¹⁰ Pamela Mobilia, “Trends in Gambling: The Pari-Mutuel Racing Industry and Effect of State Lotteries, a New Market Definition,” *Journal of Cultural Economics*, Volume 16, 1992, p. 51-62.

⁵¹¹ Anthony Popp and Charles Stehwien, “Indian Casino Gambling and State Revenue: Some Further Evidence,” *Public Finance Review*, Volume 30, 2002, p. 320-330.

⁵¹² Margaret Ray, “How Much on That Doggie at the Window? An Analysis of the Decline in Greyhound Racing Handle,” *Review of Regional Studies*, Volume 31, 2001, p. 165-176.

⁵¹³ Donald Siegel and Gary C. Anders, “Public Policy and the Displacement Effects of Casinos: A Case Study of Riverboat Gambling in Missouri,” *Journal of Gambling Studies*, Volume 15, 1999, p. 105-121.

⁵¹⁴ Donald Siegel and Gary C. Anders, “The Impact of Indian Casinos on State Lotteries: A Case Study of Arizona,” *Public Finance Review*, Volume 29, 2001, p. 139-147.

⁵¹⁵ Richard Thalheimer and Mukhtar M. Ali, “The Demand for Parimutuel Horse Race Wagering and Attendance,” *Management Science*, Volume 41, 1995, p. 129-143.

⁵¹⁶ Douglas M. Walker and John D. Jackson, “Do U.S. Gambling Industries Cannibalize Each Other?” *Public Finance Review*, Volume 36, 2008, p. 308-333.

industry (intrastate) results are summarized in Figure 52. For example, the “Casino” row indicates that increases in casino revenues within a state have a negative impact on dog racing and lottery revenues/handle within a state, but a positive impact on horse racing handle within the state. Since Indian casino revenue data are generally not public, Walker and Jackson instead use the square footage of Indian casinos in a state as a proxy for Indian casino revenues.

Figure 52: Summary of intrastate industry relationships in the United States

Model Variable	Casino	Dog racing	Horse racing	Lottery
Casino		–	+	–
Dog racing	(–)		–	+
Horse racing	+	–		+
Lottery	–	+	+	
Indian square footage	+	(+)	+	–

Source: Douglas M. Walker and John D. Jackson, “Do U.S. Gambling Industries Cannibalize Each Other?” *Public Finance Review*, Volume 36, p. 325.

Note: () indicates statistically insignificant at normal levels.

Walker and Jackson also examined the relationship between an industry in one state and the availability of gambling in neighboring states. Figure 53 illustrates these relationships. Figure 53 shows that, for example, the greater the availability of casinos in neighboring states, the lower the casino revenue and lottery revenue in the particular state.⁵¹⁷

Figure 53: Summary of adjacent-state competition

Model Variable	Casino	Dog racing	Horse racing	Lottery
Adjacent Casinos	–	(+)	+	–
Adjacent Dog racing	(–)	+	+	–
Adjacent Horse racing	+	–	+	+
Adjacent Lottery	(–)	–	+	–

Sources: Douglas M. Walker and John D. Jackson, “Do US Gambling Industries Cannibalize Each Other?” *Public Finance Review*, Volume 36, 2008, p. 322; Spectrum Gaming Group, “New York Gaming Analysis: Potential Impact of Commercial Casinos on New York Lottery Ticket Sales and Video Gaming Machine Revenues (Linwood, NJ, June 2013), p. 16.

Note: () indicates statistically insignificant.

As shown in the above table, not all industries appear to act as substitutes across state lines. However, the availability of casinos tends to harm casinos and lotteries in neighboring states. Lotteries also harm lotteries in neighboring states.

Three other studies offer some insight into the substitution effect. One is a county-level study that examines the labor market effects (employment and wages) of casinos. The 2008 study by Cotti analyzes the effects on labor of counties that have a casino (or casinos), relative to

⁵¹⁷ “Availability of casinos” is measured as the percentage of neighboring states that allow casinos in a particular year. Hence, this measures the ease of access to casinos in nearby states, rather than the casino revenues in neighboring states.

those that do not.⁵¹⁸ Cotti finds that, generally, casino counties fare better, in terms of employment and wages, relative to non-casino counties. Cotti summarizes his results, “On average, casinos play a significant role in increasing both employment, earnings, and promoting economic development in a county” (p. 15). The results are more significant in rural casinos, relative to urban ones, since a casino represents a relatively large business in a smaller community. The evidence suggests that, on net, there is no net negative impact of casinos on employment or wages. This is not to say, however, that some industries may not see a negative impact from the introduction of casinos.

Another study examines the effect of casinos on retail property values. In their 2011 paper, Wiley and Walker examine how casinos in Detroit have affected property values, based on commercial property sales data.⁵¹⁹ Their results suggest that the casinos tend to have a positive impact on property values, particularly for some sectors related to tourism (e.g., service stations, restaurants) and on “general freestanding” retail properties. This evidence from Detroit is one of the only published papers to directly examine the effect of casinos on other non-casino businesses. Of course, not every community will see the same relationship to casinos that Detroit does.

Finally, the 2007 paper by Wenz examined the impact of casinos on residential property values.⁵²⁰ Wenz found that casinos have a net positive impact on housing prices, of about 2 percent, in the same geographic area as a casino. At the same time, property values in bordering areas see an even greater effect, of about 6 percent. Notably, most of the casino areas analyzed are tribal casinos, so Wenz’s results may be due partially to the fact that tribal casinos may be more likely to be located in relatively depressed local economies. Indeed, Wenz finds that the positive impacts of casinos decline as population density increases.⁵²¹ Several other studies (one on Atlantic City, and one on Windsor, Ontario) suggest, when the effect of crime is considered, the net impact of casinos on property values may be negative.⁵²²

We caution that such studies, no matter how rigorous they may be in developing their models or assumptions, should never be taken at face value, particularly as authors rarely take

⁵¹⁸ Chad D. Cotti, “The Effect of Casinos on Local Labor Markets: A County Level Analysis,” *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 17-41.

⁵¹⁹ Jon A. Wiley and Douglas M. Walker, “Casino Revenues and Retail Property Values: The Detroit Case,” *Journal of Real Estate Finance and Economics*, Volume 42, 2011, p. 99-114.

⁵²⁰ Michael Wenz, “The Impact of Casino Gambling on Housing Markets: A Hedonic Approach,” *Journal of Gambling Business and Economics*, Volume 1, 2007, p. 101-120.

⁵²¹ Douglas M. Walker, *Casinomics* (2013), p. 219. This discussion of Wenz’s study is based on Walker’s discussion.

⁵²² Andrew J. Buck, et al., “A Von Thünen Model of Crime, Casinos and Property Values in New Jersey,” *Urban Studies*, Volume 28, p. 673-683. Alan G. Phipps, “Crime and Disorder, and House Sales and Prices Around the Casino Sties in Windsor, Ontario, Canada,” *The Canadian Geographer*, Volume 48, 2004, p. 403-432.

into account the full complexity of issues. In Atlantic City, the notion that casinos had a negative effect on property values might comport within the parameters of a specific model, but we would respectfully point out that, in 1978 when the first casino opened, the entire assessed valuation of all property in Atlantic City was \$308 million, a number that actually had been declining in tandem with Atlantic City's downward spiral in the years preceding gambling.⁵²³ Within two years, the assessed valuation grew by more than 182 percent,⁵²⁴ a phenomenon that we would attribute almost entirely to the presence of this new industry. That growth, of course, did not dispel concerns about the impact of casinos, and created new sets of problems for those property owners that faced steeper tax bills.

When dealing with complex issues such as substitution, both facts and perceptions must be considered and addressed. In the case of casino gambling, it becomes an understandable concern for business owners, voters, politicians, and others because the introduction of casinos requires a positive act by government. Therefore, while there may be relatively little interest in, say, the economic impacts of opening a new restaurant in a particular neighborhood, that would not be the case with casinos.

Nevertheless, we can begin to identify the impacts of a new casino in Florida by considering the possible sources of spending at the new casino. Those revenues would come from a combination of these sources:

- New spending from Floridians
- New spending from out-of-state tourists
- Existing spending on other Florida non-gambling industries (by Floridians and tourists)
- Existing spending on other Florida gambling industries (by Floridians and tourists)
- Existing spending by Floridians on out-of-state purchases, including gambling

The evidence suggests that casinos are likely to have a negative impact on lotteries, and some other businesses may see decreased revenue as a result of a casino's opening. But this is no different from what happens when any other business opens. Certainly some of the revenues for a new casino would come at the expense of other, existing gambling firms in Florida. Revenues are likely to come from all five of the sources identified above, but it is very difficult to predict the exact percentage from each source. In any case, the substitution effect is relevant for any new business that opens.

⁵²³ George Sternlieb and James W. Hughes, *The Atlantic City Gamble*, Twentieth Century Fund, 1983, p. 97.

⁵²⁴ *Ibid.*

a. Conclusion

To be sure, new casinos create a substitution effect, but it is much less clear what the significance of it will be and which industries would be most affected by it. The academic studies that have been performed suggest that, at least for non-gambling industries, casinos are more likely to act as complements than substitutes. This suggests that the concern over the substitution effect may be greater than is justified. After all, the casino industry has expanded across the United States over the past two decades, and there is no evidence to suggest that this expansion has led to any long-term negative economic impacts for casino-hosting regional economies.

Still, we do not discount the importance of concerns regarding substitution, nor do we dismiss the notion that casinos compete. Indeed, they compete against any other option that seeks a share of discretionary income. While it is difficult to determine with any level of precision which businesses will win and which will lose in such competitive battles, there is one overarching certainty with respect to substitution, and that holds true for tourism in general, as well as for gaming: The dollar-for-dollar substitution with local businesses will be less pronounced and less impactful if new businesses – be they casinos or other attractions – help attract visitors and dollars from outside Florida.

6. Short- and Long-Term Fiscal Impacts of Government Policies

In an increasingly competitive global economy, casino gambling is seen as a quick and easy way to create jobs, increase convention and tourism business and stimulate development of additional visitor attractions and amenities. However, to maximize the economic benefits of casino development and to minimize any potential negative impacts, it is vital that state and local policy makers have a clear understanding of how different implementation scenarios and community variables may affect short and long term outcomes.

Land-use planning and zoning power is the most effective tool that state and local governments have to plan for and control development related impacts. Casinos are unlike other types of development projects such as an office park or a shopping center. Casino development may potentially have a greater impact on traffic, housing stock, the labor force and municipal services. Newer, more sophisticated planning tools such as geographic information systems and economic modeling enable government planning to have a better understanding of the potential impacts of projects and thereby plan more appropriately.

A study of the impact of casino gambling in Connecticut by Spectrum found that the absence of regional planning had significantly impeded state and local officials in their efforts to address the impact of two Indian casinos on traffic, public safety and education.⁵²⁵

⁵²⁵ *Gambling in Connecticut.*

Atlantic City is a classic example of how poor land use planning, particularly in the formative period immediately following the passage of casino gaming, greatly impeded orderly development and the city's potential.⁵²⁶ Rampant, unchecked real estate speculation became an immediate and enduring problem for the city. The phenomenal success of Atlantic City's first casino made potential casino developers willing to pay almost any price to get their projects started. Slum neighborhoods suddenly took on new value. To real estate speculators, only the land had value. Buildings and businesses did not. Thousands of lives were disrupted when buildings were sold and tenants evicted. Once-stable neighborhoods suddenly became vacant and desolate.

Atlantic City government did little to tame speculation and in many ways encouraged it. Its master plan was deemed unrealistic and local officials did little to adhere to whatever guidelines it did offer. Nearly everyone who applied for a variance got one. In effect, everywhere in the city was a potential casino site.⁵²⁷

The national experience with legalized gaming has matured to the point where policy makers have a much better idea of what may or may not work effectively in a particular community.

Prior to 1978, casino gambling was only legal in Nevada, where it was implemented in 1931. In 1976, New Jersey became the nation's second state to approve legalized gambling. In New Jersey, legalized gambling was specifically intended to be "a unique tool of urban redevelopment"⁵²⁸ According to its enabling legislation, "a limited number of casino rooms in major hotel convention complexes, permitted as an additional element in the hospitality industry of Atlantic City, will facilitate the redevelopment of existing blighted areas and the refurbishing and expansion of existing hotel, convention, tourist, and entertainment facilities."⁵²⁹ The state constitution limited casino gambling solely to Atlantic City, one of the state's most economically distressed communities.

For a number of years, Atlantic City was the only legal casino gaming venue in the eastern United States during a period when the public's interest in casino gambling was heightening. The spectacular profitability of Atlantic City's first casinos, their initial success in creating construction and permanent jobs that paid good salaries and provided good benefits, fostered widespread interest in casino gambling as an economic development tool. Although the urban redevelopment aspects of New Jersey's casino experiment were debatable, other states took note of casino gambling's economic impact and wanted to get in the game. In 1989, South

⁵²⁶ By D.W. Nauss, "Atlantic City Planning Does Not Pass Go," *New Jersey Reporter*, Volume 9, No. 10, 1981, p. 6-13.

⁵²⁷ *Ibid.*

⁵²⁸ New Jersey Casino Control Act, N.J.S.A. 5:12-1.

⁵²⁹ *Ibid.*

Dakota and Iowa approved legalized gambling, initiating a new era of casino expansion. Currently, commercial casinos (non-Indian gaming) operate in 23 states.⁵³⁰

By 2008, Atlantic City's remarkable financial performance began to slip, due largely to the national recession and, more ominously, to growing competition from nearby states with new casinos. In 2012, among all states with casino gaming, New Jersey experienced the largest drop in both gross gaming win and gaming tax revenue.⁵³¹ One of its newest and largest casinos, the \$2.4 billion resort, Revel, which opened in May 2012, filed for bankruptcy less than a year later.⁵³² As one recent observer noted, "The Revel is a hulking reminder of big dreams going wrong and gambles not paying out. ... City planners and state legislators looking to casinos as sure ways of generating revenue should take note of this cautionary tale."⁵³³

The financially ailing Revel is not alone. The \$2.3 billion Foxwoods Casino Resort, owned by Mashantucket Pequot Tribal Nation in Connecticut, is also struggling financially.⁵³⁴ Like Atlantic City, with new competition coming on line in Massachusetts, Connecticut too can expect to see declining revenues and a more competitive gaming environment.

The dramatic rise and fall of Atlantic City's casino industry holds important lessons for other jurisdictions considering casino gambling. Casinos must be right sized and properly integrated into their host communities. Neither exists in a vacuum and both must be able to respond quickly to changing consumer tastes and market conditions. By establishing itself largely as a convenience destination, failing to plan for gaming competition elsewhere, and failing to responsibly incorporate casinos into the social and economic fabric of the city, the prognosis for both Atlantic City and its casino industry is an open question.

Workforce development is another area where proper planning can have positive short- and long-term impacts. Casino resorts are labor intensive and require a variety of skill levels to operate efficiently and meet the expectations of their patrons. Depending on the magnitude of their workforce demands, a new casino could cause a major disruption in the regional labor market. Getting unskilled and low skilled workers into the workplace can be a challenge.

⁵³⁰ 2013 *State of the States*, p.2.

⁵³¹ Ibid.

⁵³² Donald Wittkowski, "Revel takes steps to restructure finances, ownership," *The Press of Atlantic City*, May 8, 2013 http://www.pressofatlanticcity.com/business/revel-takes-steps-to-restructure-finances-ownership/article_8e43888d-9b71-5f9d-a2d8-f14fe62018e8.html.

⁵³³ Luke Barley, "Atlantic City's Incredibly Bad Gamble on the Revel Casino," *The AtlanticCities.com*, May 9, 2013 <http://www.theatlanticcities.com/jobs-and-economy/2013/05/atlantic-citys-incredibly-bad-gamble-revel-casino/5541/>.

⁵³⁴ Michael Sokolove, "Foxwoods is fighting for its life," *New York Times Magazine*, March 14, 2012 <http://www.nytimes.com/2012/03/18/magazine/mike-sokolove-foxwood-casinos.html?pagewanted=all&r=1&>.

In Massachusetts, where casino development was recently enacted, it is anticipated that over 30,000 individuals will need to be considered for employment in order to fill the 10,000 jobs that are expected. To meet this objective, the state recently ramped up its workforce recruitment process and employment infrastructure. To accomplish this, a collaboration of workforce stakeholders joined together. These include one-stop career centers, community based organizations, organized labor, community colleges and other public and private educational entities.⁵³⁵

The past three decades provide policy makers with an abundance of data and first-hand examples of how casino gambling impacted a community and what the role of policy makers should be. However, a clear, compelling understanding of the costs and benefits remains elusive and the academic literature is contradictory.

The 1999 National Gambling Impact Study Commission Report noted that social and economic impacts are not as easily severable as those responsible for policy making would prefer.⁵³⁶ Quantifying gambling related social costs and benefits can be extremely difficult. The Commission went on to note that the economic benefits of casino gambling appeared most powerful in more financially distressed communities where economic development opportunities were fewer.

In a 2005 study, Phineas Baxandall and Bruce Sacerdote compared the experience of counties in the United States that have casinos with counties that do not. They found that casino development appears to produce both modest positive effects as well a modest negative effects as well no statistically significant effects at all in some areas. They analyze the effects of casinos at the county level rather than the state level because entire states are simply too large to discern a casino's influences on outcomes such as employment or crime.⁵³⁷ In *Gambling in America: Costs and Benefits*, Earl Grinols found that when all relevant factors were considered, the social benefits of casino gambling were outweighed by the social costs.⁵³⁸

The national experience with casino gambling has led policy makers, urban planners, social scientists and casino developers to recognize that a casino's chance of success increases if it is properly sized and blended into the host community. The type, scale and format of a casino will inevitably be a factor in what impact it has upon the community.

⁵³⁵ Massachusetts Gaming Commission, "Workforce Development and Diversity," <http://massgaming.com/about/diversity/> (accessed May 20, 2013).

⁵³⁶ NGISC.

⁵³⁷ Phineas Braxandall and Bruce Sacerdote, "Betting on the Future: The Economic Impact of Legalized Gambling," *Rappaport Institute for Greater Boston- Policy Briefs*, January 13, 2005 http://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-programs/centers/rappaport/policybriefs/betting_final.pdf.

⁵³⁸ Earl L. Grinols, *Gambling in America: Costs and Benefits*, 2004.

Iowa was an early adopter of casino gambling and Dubuque is often cited as a community where casino gambling has been a successful component of an overall economic development strategy. A 2011 report noted that one would be hard pressed to find someone opposed to casinos among local residents.⁵³⁹ Dubuque Assistant Chief of Police Terry Tobin noted that his department does not have any concerns about organized crime, prostitution, robbery or other predatory crimes. City Manager Michael Milligen stated that poverty was not a problem and that local wages have increased.⁵⁴⁰ Iowa is unique among states with casino gambling. In every county that has a casino, voters must pass a referendum approving casino gambling to continue.⁵⁴¹ In Dubuque, the last such referendum passed four years ago with 70 percent of county voters approving.⁵⁴²

David G. Schwartz, Director of the Center for Gaming Research at the University of Nevada, Las Vegas, notes how casino resorts have undergone significant transformations since they first appeared in Nevada in 1931. In their early form, they consisted of low-rise motel buildings with 200 to 800 rooms centered on a casino/theater/restaurant area. Other design elements included spacious grounds and swimming pools. Beginning in the mid-1950s, casino operators developed larger, thousand-plus room hotel towers atop vast, low-rise buildings containing the casino, lounges, theaters, convention facilities and restaurants. All the amenities were integrated into a casino resort complex. In the 1990s, casino operators took these design elements further by developing elegantly appointed 3,000-room plus hotel complexes. These facilities, often costing \$1 billion or more, had distinctive architectural designs, elegant spas and pool areas, gourmet restaurants associated with world recognized chefs and high-end retail. They also placed a greater emphasis on the non-gaming aspects of the facility.⁵⁴³

Eadington of University of Nevada, Reno wrote extensively on the social and economic impacts of casinos and is credited for almost singlehandedly establishing the economics of gambling as a field of study.⁵⁴⁴ He noted that it is commonplace in a community considering casino gambling that the forces for and against actively debate the pros and cons of the proposal by focusing on the impacts they believe it will have on the community. Such debates are usually extremely emotional and contentious. However, according to Eadington, such debates too often

⁵³⁹ "Casino Impact in Dubuque, Iowa," WFIR.com, posted June 9, 2011

http://www.wfir.com/home/headlines/Casino_Impact_in_Dubuque_Iowa_123594769.html

⁵⁴⁰ Ibid.

⁵⁴¹ Iowa Gaming Association, "Public Policy - Referendum Vote Process," IowaGaming.org,

<http://www.iowagaming.org/about-us/public-policy.aspx> (accessed May 6, 2013).

⁵⁴² Ibid.

⁵⁴³ David G. Schwartz, Ph.D., "Casino Resort Evolution: The four stages, 1941-2005," *UNLV Center for Gaming Research*, October 2005 http://gaming.unlv.edu/media/Casino_Resort_Evolution.pdf.

⁵⁴⁴ Kahlil S. Philander, Ph.D. and Douglas M. Walker, Ph.D., "William R. Eadington and the Economics of Gambling," *UNLV Gaming Research & Review Journal*, Volume 16 Issue 2, 2012, p. 9.

reflect little or no understanding of the different types of casinos models and legislative frameworks and how these factors may affect desired community outcomes.⁵⁴⁵

a. Different Casino Models

Eadington believed that in terms of increasing the economic potential of casino gaming while minimizing the costs, the modern integrated resort casino (another term for a destination casino resort) model offers the greatest potential. Many jurisdictions have “gaming centric” casinos. These are places where one mostly goes to play slot machines and table games. This type of facility generally will provide limited food and beverage options along with limited hotel accommodations, or none at all. Usually, 80 percent or more of their revenues come from gaming activities.⁵⁴⁶

Conversely, integrated resort casinos offer a wide variety of leisure and entertainment options other than just gambling. They all have iconic architecture and require significant capital investment. By offering superior dining, entertainment and shopping, they often become popular attractions that appeal to both domestic and international tourists. They appeal to a broader market and compete more effectively for the high-end visitor dollar than gambling-centric casinos. The employment potential of integrated resort casinos is also greater. Their 24-hour operations, diversity of offerings and specialized services, require that they employ substantially more highly skilled and professionally trained employees than gaming-centric casinos.⁵⁴⁷

Integrated resort casinos pose more potential for convention related growth. Convention and conference organizers prefer to have their event in a venue that attendees will find attractive and appealing in order to achieve maximum attendance. Convention goers often want adult forms of entertainment. Integrated casino resorts with their vibrant nightlife, ample room supply, conference facilities and host of amenities can help fulfill that need.

Gary Loveman, Caesars Chairman and CEO, identified a hybrid model. He contends that the conventional view of casinos being either convenient neighborhood based slot parlors or as integrated resort casino destinations is incomplete. He states that over the past decade another model has emerged for policy makers to consider which he calls “the city integrated model.”⁵⁴⁸ According to Loveman, its defining feature is integration with its community’s pre-existing businesses and attractions. In this model, the casino serves as a hub whose spokes extend out

⁵⁴⁵ William R. Eadington and Meighan R. Doyle, “Everything to Everyone,” *Global Gaming Business Magazine*, February 3, 2010. <http://ggbmagazine.com/issue/vol-9-no-2-february-2010/article/everything-to-everyone>.

⁵⁴⁶ Ibid.

⁵⁴⁷ Ibid.

⁵⁴⁸ Gary Loveman, “Heart of the City,” *Global Gaming Business Magazine*, April 30, 2013 <http://ggbmagazine.com/issue/vol-12-no-5-may-2013/article/heart-of-the-city1>.

beyond its own amenities to established restaurants, shops, hotels and cultural organizations in the adjoining area. Its outward, rather than inward, focus renders it distinct from the integrated resort casino model while capturing many of that model's benefits.

In May 2012, a city integrated-style casino, Horseshoe Casino Cleveland, opened in Cleveland, OH, and may offer helpful insights to policy makers. Financially, its first year has produced mixed results. Profits have been lower than anticipated and the city will only receive \$13.4 million in gaming taxes, well below earlier estimates that assumed additional construction and ranged as high as \$29 million. However, the city's share is offset by the \$3.1 million in additional expenses related to the police department, which had to triple staffing in its downtown unit. Overall the casino's impact on the downtown area is considered positive with business owners saying the area is far more active and livelier. Crime did not soar as some predicted and the casino did not cause any adverse impact on local bars and restaurants. The casino employs 1,600 locals.⁵⁴⁹

The new Horseshoe Casino in downtown Cincinnati, OH, is following the same model. The casino, which does not have its own hotel, has entered into partnership agreements with several nearby hotels and restaurants.⁵⁵⁰

7. Conclusion

The academic research reviewed here suggests that casinos can have a variety of significant social and economic impacts, both positive and negative. Perhaps the most important question is whether casinos generate more benefits than costs. Unfortunately, the answer to this question is not obvious, and probably depends on the jurisdiction under consideration. Certainly in some jurisdictions, casinos have had a large positive impact, such as in Las Vegas and in the Gulf Coast of Mississippi. But casinos may bring their own problems. Most of the negative social impacts studied in the literature come from "disordered gamblers," who psychologists estimate represent about 1 percent of the general population. These individuals experience a variety of problems, including marital and career problems. They also sometimes engage in crime in order to deal with the financial problems caused by their excessive gambling.

It is important that any jurisdiction carefully consider these possible impacts prior to introducing or expanding legalized gambling. Although there may be obvious benefits from casinos, such as job creation and a new source of tax revenues, research confirms that there are some social harms that accompany the economic benefits of casinos.

⁵⁴⁹ Thomas Ott, "Cleveland casino short of revenue projections but draws praise," *The Plain Dealer*, May 12, 2013 http://www.cleveland.com/metro/index.ssf/2013/05/cleveland_casino_short_of_reve.html.

⁵⁵⁰ Alexander Coolidge, Cincinnati casino allies with 7 hotels," *Cincinnati Enquirer*, February 7, 2013 http://news.cincinnati.com/article/20130206/BIZ/302060087/Cincinnati-casino-allies-7-hotels?nclick_check=1.

When considering the economic and social impacts of a casino, we must consider the effects of the casino relative to what otherwise would have happened (or what business might have otherwise opened). In addition, we must consider whether the observed effects are related to economic changes, in general, or are due to the nature of gaming specifically.

The experiences in a variety of casino jurisdictions confirm that careful planning is important for the success of the casino industry. Casinos should be integrated with their surrounding communities; they should be introduced in appropriate sizes and numbers for the current and potential future markets. The benefits of introducing casinos can be maximized, and the negative impacts minimized, if their development and regulation is carefully considered.

III. Economic Assessment of Florida's Existing Gambling Industry

As discussed throughout this report, Florida has an extensive gambling industry, principally through its state lottery, Native American casinos and pari-mutuel facilities. Each of these gambling sectors generates revenue that contributes to the Florida economy through tax payments, direct employment, indirect employment and induced employment. This chapter of the report quantifies the economic impact of the industry.

Gambling Sectors: Size and Importance

An analysis of gaming subsectors and their size and economic importance.

In Chapter II(B) we discuss the size and extent of Florida's primary gambling sectors, including the revenues. Here we provide more detail as to the revenue performance of each sector and, where available, the annual employment and wages, as well as purse, handle and attendance data for the pari-mutuel sectors. Spectrum endeavored to obtain, on a sector basis the desired data going back to 1990, but only the pari-mutuel performance data were available going back that far.

1. Pari-Mutuel

The Division of Pari-Mutuel Wagering does not collect the number of people employed at pari-mutuel facilities but upon request we did receive 2012 data showing that the industry's wages, exclusive of payroll taxes and benefits and compensation paid to directors, were \$148.8 million. Following are analyses of key performance and economic indicators for each pari-mutuel sector. It is important to note that wages and jobs for the racing sectors represent direct facility employment only; they do not account for the jockeys, trainers and others who provide economic impact but are not track employees.

a. Racetrack Slots

As of 2012, the six Florida racinos collectively had 3,319 employees – or an average of 553 employees per racino in both gaming-related and non-gaming capacities.⁵⁵¹ The following table shows slot-machine-related operating results for the six racinos for year ended 2012.

⁵⁵¹ 2013 State of the States.

Figure 54: Florida racino slot performance (2012)

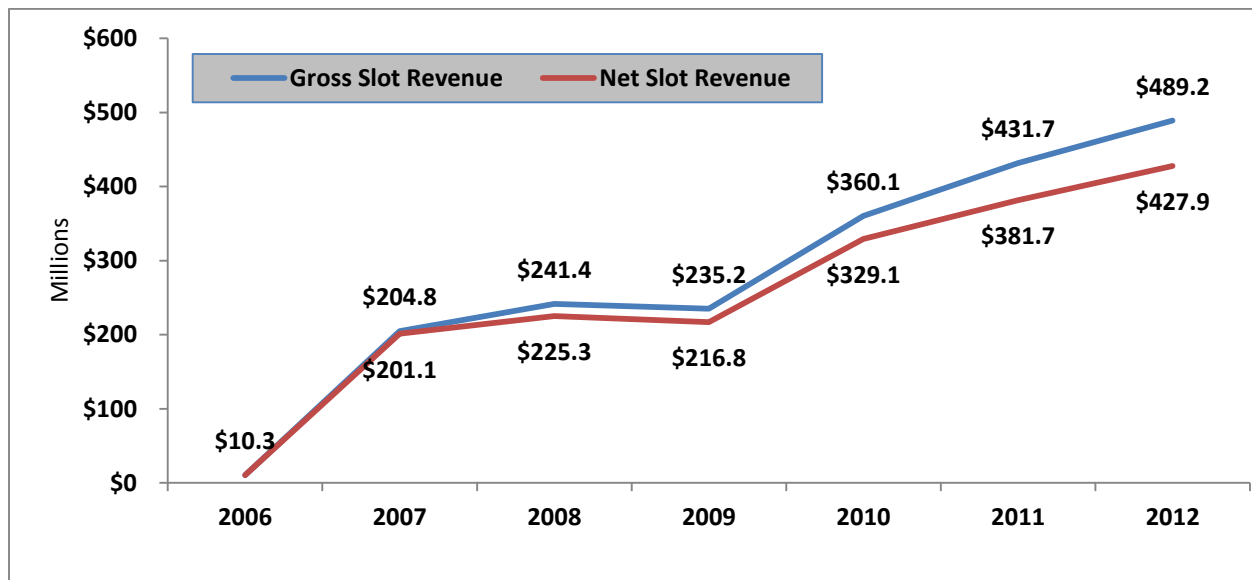
Racino	Casino Miami	Magic City	Calder	Gulfstream Park	Mardi Gras	Pompano Park	FL TOTAL
Slot Revenue	\$59.3	\$79.0	\$90.2	\$59.9	\$61.9	\$138.9	\$489.2
Promo Credits	(\$6.4)	(\$2.2)	(\$17.8)	(\$9.0)	(\$8.8)	(\$17.2)	(\$61.4)
Net Slot Revenue	\$53.0	\$76.8	\$72.4	\$50.9	\$53.1	\$121.7	\$427.9
Promo Credits, % of Slot Rev.	10.7%	2.7%	19.7%	15.0%	14.2%	12.4%	12.5%
Slot Rev. Unit / Day	\$165	\$273	\$204	\$194	\$161	\$261	\$211
Net Slot Rev. Unit / Day	\$147	\$266	\$164	\$165	\$138	\$229	\$185

Source: Florida Department of Business and Professional Regulation

As illustrated, Florida’s six racinos generated slot revenue of \$489.2 million in 2012. Net slot revenue for Florida’s six racinos was \$427.9 million in 2012, as \$61.4 million of revenue was in form of promotional credits. Promotional credits averaged 12.5 percent of slot revenue for the six racinos. The average daily win per slot was \$211; however, netting promotional credits reduced this average to \$185 over the annual period.

The following chart shows annual slot revenue (both gross and net) from inception through calendar year ended 2012.

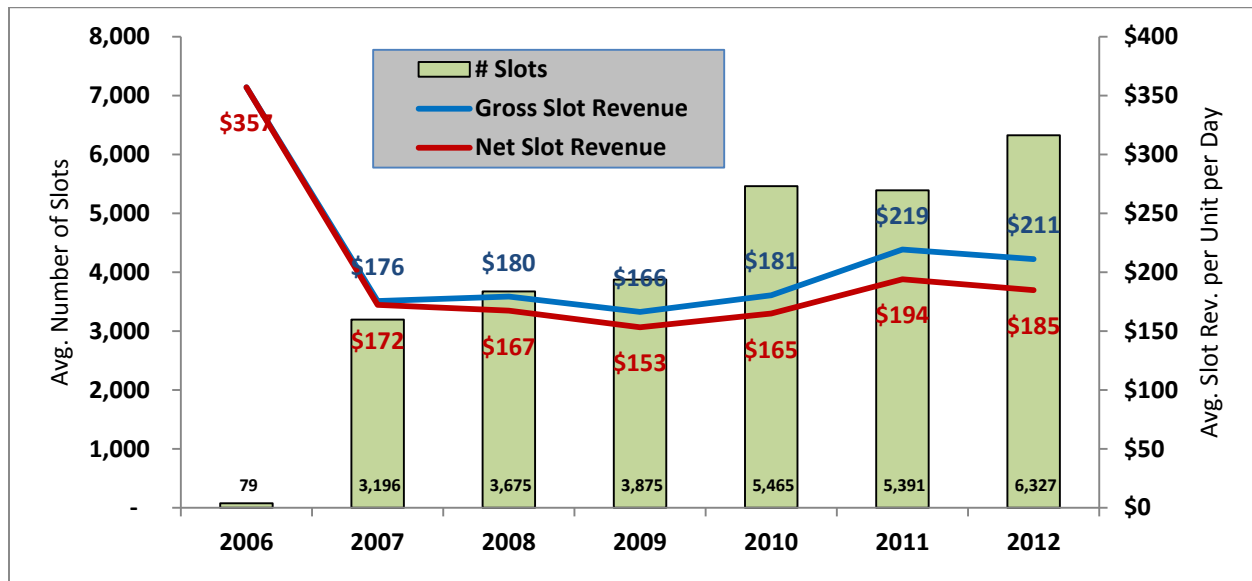
Figure 55: Florida racino slot performance, 2006-2012



Source: Florida Department of Business and Professional Regulation

From inception through 2012, Florida’s racinos have generated \$1.97 billion in gross slot revenue and \$1.79 billion in net slot revenue. The following chart shows annual average slot revenue per slot machine per day (both gross and net) through 2012, along with average number of slots in operation annually.

Figure 56: Florida racino slot revenue/machine/day and counts, 2006-2012



Source: Florida Department of Business and Professional Regulation

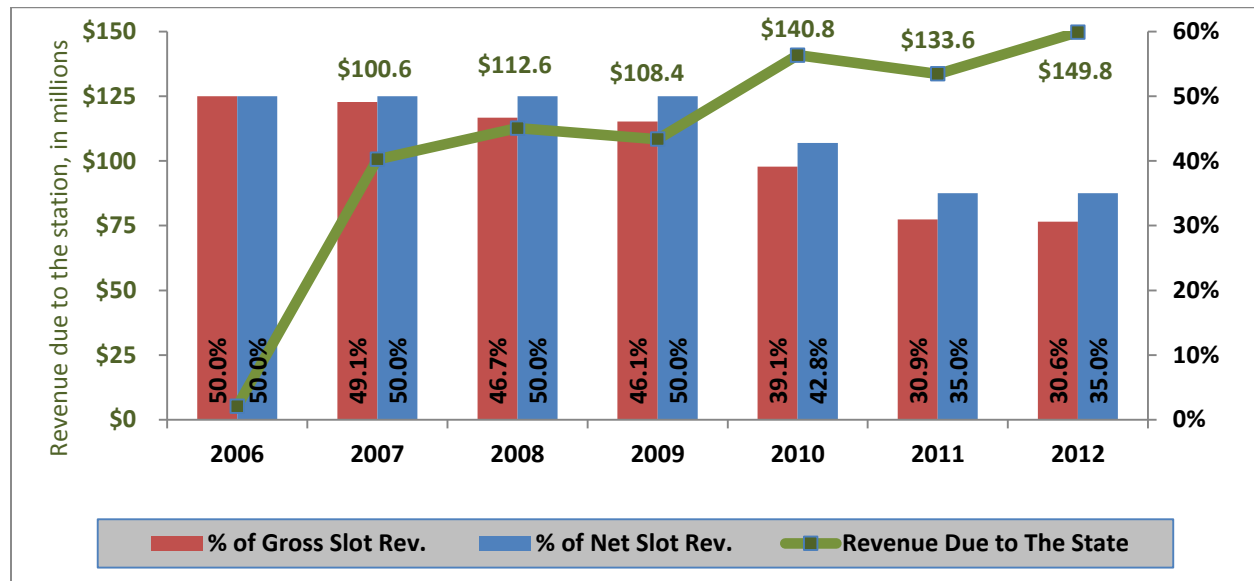
The current tax on slot revenue is 35 percent (or “revenue due to the state”), while this is imposed on net slot revenue (i.e., net of promotional credits and unclaimed tickets).⁵⁵² However, at inception the applicable tax rate was 50 percent and has since been reduced. In addition to the tax on slot revenue, each pari-mutuel location having slot machines is subject to \$2 million annual Slot License Fee, along with an annual \$250,000 Compulsive or Addictive Gambling Prevention Program Fee.⁵⁵³

The following chart shows annual revenue due to the state from inception through calendar year ended 2012, along with effective tax rate by year (expressed as a percentage of gross and net slot revenue).

⁵⁵² Florida Department of Business and Professional Regulation, Division of Pari-Mutuel Wagering, 81st Annual Report Fiscal Year 2011-2012.

⁵⁵³ Ibid.

Figure 57: Florida racino direct tax on slots, 2006-2012



Source: Florida Department of Business and Professional Regulation

From inception through calendar year ended 2012 Florida’s racinos have generated \$750.9 million in revenue due to the state, from the direct tax on slot revenue.

b. Greyhound

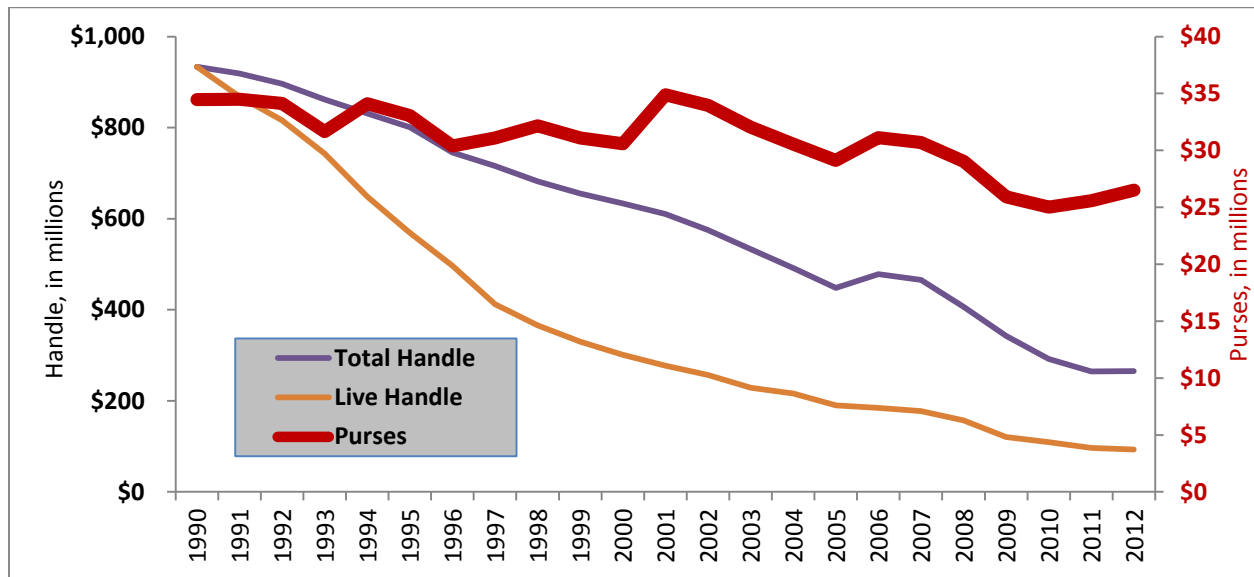
Greyhound racing, which is Florida’s most widespread form of pari-mutuel racing, is clearly in serious decline. In the following two charts, note that the numbers of performances and purses have held relatively steady despite dramatic decreases in handle and attendance. Also note that most tracks no longer charge for admission.

Nonetheless, the greyhound tracks spent more than \$70 million in 2009 on goods and services purchased and had more than 5,400 employees on their payroll that was in excess of \$98 million. They paid direct state taxes of more than \$26 million.⁵⁵⁴

Jack Cory, a lobbyist for the greyhound owners, told Spectrum that the greyhound industry has an estimated overall economic impact of more than \$50 million when the spinoff costs of caring for the dogs is included, a claim that Spectrum could not independently verify. Those spinoff costs would include veterinary care, transportation, and feeding the dogs.

⁵⁵⁴ Innovation Group, “Florida Pari-mutuel Gaming Venues Market Assessment,” p. 8, October 2009.

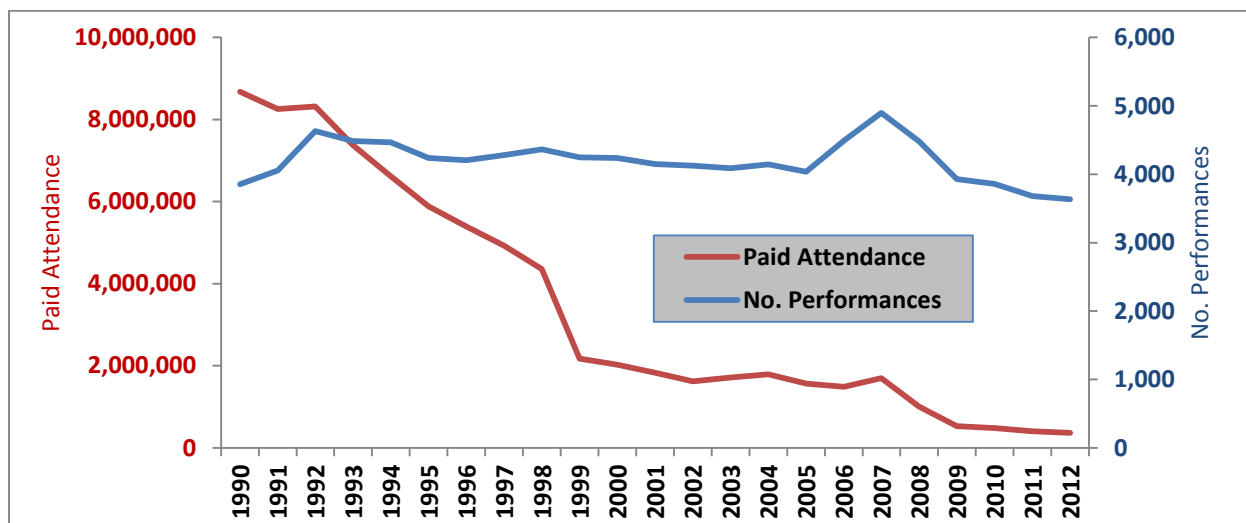
Figure 58: Florida greyhound purses and handle, 1990-2012



Source: Division of Pari-Mutuel Wagering

Note: Total handle numbers are understated as PMW does not collect data on out-of-state generated handle, which is the single largest component of handle.

Figure 59: Florida greyhound paid attendance and performances, 1990-2012



Source: Division of Pari-Mutuel Wagering.

Note: Most tracks no longer charge for admission.

c. Thoroughbred

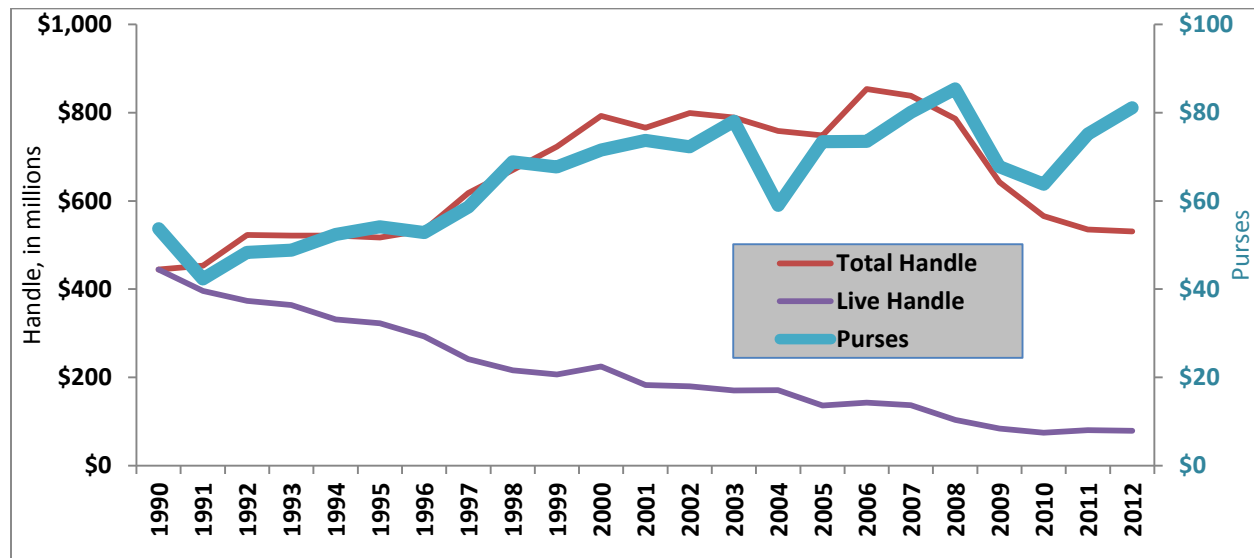
There were 6,487 Florida-licensed thoroughbred owners from 1,352 Florida-licensed stables that participated in Florida racing during 2012-2013. These owners employed more than 1,467 thoroughbred trainers at Florida’s three thoroughbred tracks. In turn, these trainers employed about 4,000 backside (stable) employees consisting of foremen, exercise people,

grooms, hot walkers and others. It is estimated that the equivalent of about 3,000 thoroughbred horses reside full-time in Florida and that each horse generates about \$25,000 in expenditures, resulting in an economic impact of \$75 million. Some of those costs include money spent on horse transport, stall bedding, grooming, and vet services.⁵⁵⁵

Florida is home to more than 600 thoroughbred farms and training centers covering 70,000 acres of land. More than 75 percent of the horse farms are located near Ocala in Marion County. Ocala is also home to the Ocala Breeders' Sales Company, which stages major bloodstock auctions for thoroughbreds throughout the year. It operates a training facility that includes a one-mile racetrack. It had net sales of \$14.8 million and a payroll of \$2.3 million in FY 2012.⁵⁵⁶ Ocala Breeders' also operates a simulcast parlor where patrons wager on horse and dog races. The Florida Thoroughbred Breeders' and Owners' Association found that economic impact of the thoroughbred industry in Marion County is more than \$1.3 billion, with an investment in operations is \$3.5 billion.⁵⁵⁷

For thoroughbred racing, note in the following charts that that the numbers of performances and purses have held relatively steady despite dramatic decreases in handle and attendance.

Figure 60: Florida thoroughbred racing handle and purses, 1990-2012



Source: Division of Pari-Mutuel Wagering.

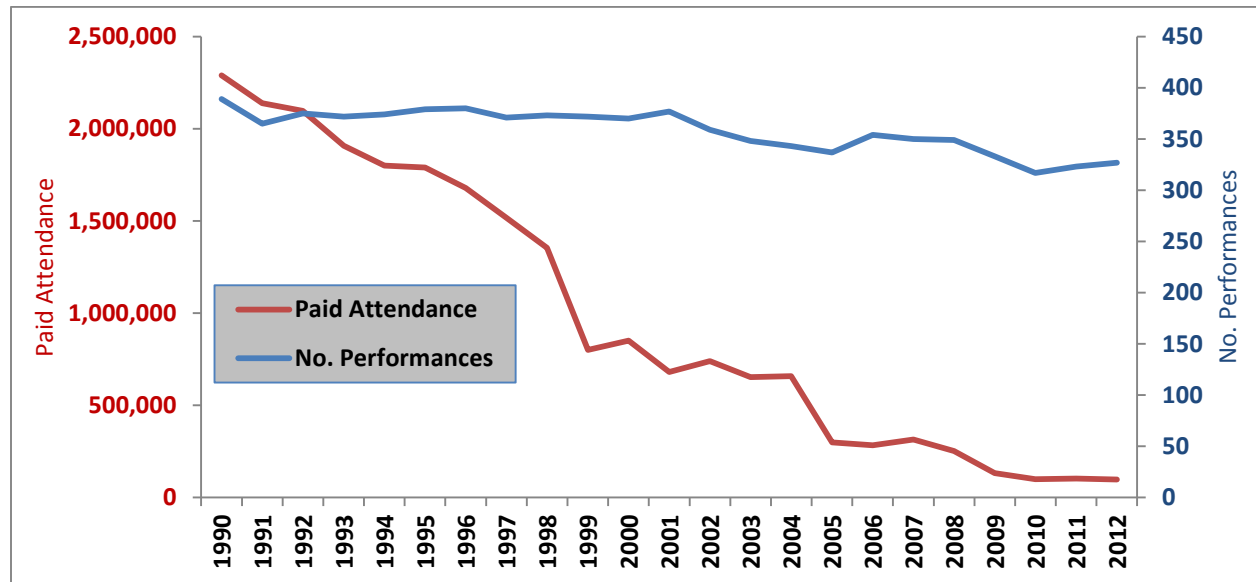
Note: Total handle may be understated as PMW does not collect data on out-of-track generated handle, the single largest component of handle.

⁵⁵⁵ Ibid.

⁵⁵⁶ Florida PMW, *Independent Auditor's Report for Pari-Mutuel Permitholders, FY 2012*.

⁵⁵⁷ Florida Thoroughbred Breeders' and Owners' Association <http://www.ftboa.com/about-us/why-florida-bred> (accessed May 23, 2013).

Figure 61: Florida thoroughbred paid attendance and performances, 1990-2012



Source: Division of Pari-Mutuel Wagering

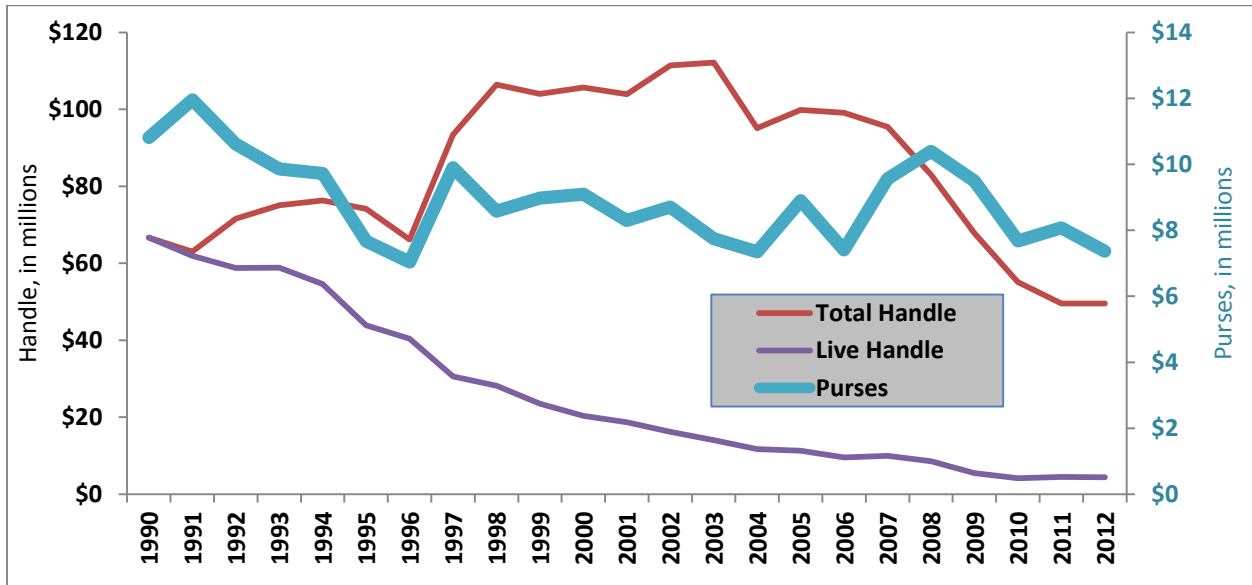
d. Harness

In harness (or standardbred) racing, as seen in the following charts, the purses and number of performances have been relatively steady while the live handle has declined. Isle Casino at Pompano Park, the only track where harness racing takes place, has stopped charging for admission. Its 2012 payroll was \$19.1 million. Pompano had a payroll of \$19.1 million in FY 2012. It had an operating profit of \$1.9 million but sustained a loss of \$2.4 million from its pari-mutuel operations while it had an operating profit of \$4.3 million from slot machines and \$90,000 from cardroom operations.⁵⁵⁸

Purses have declined slightly, by 0.5 percent, from FY 2006 (the last full fiscal year that Pompano did not have a casino) to FY 2012. The failure to increase purses has put Pompano in a position where it is not competitive with other racino states, Pennachio said, noting that breeding has seen a significant reduction in activity. In 2011, there were 40 foals. In 2006, there were 163, according to Joseph Pennachio, president of the Standardbred Breeders and Owners Association.

⁵⁵⁸ Florida PMW, *Independent Auditor's Report for Pari-Mutuel Permitholders, FY 2012*.

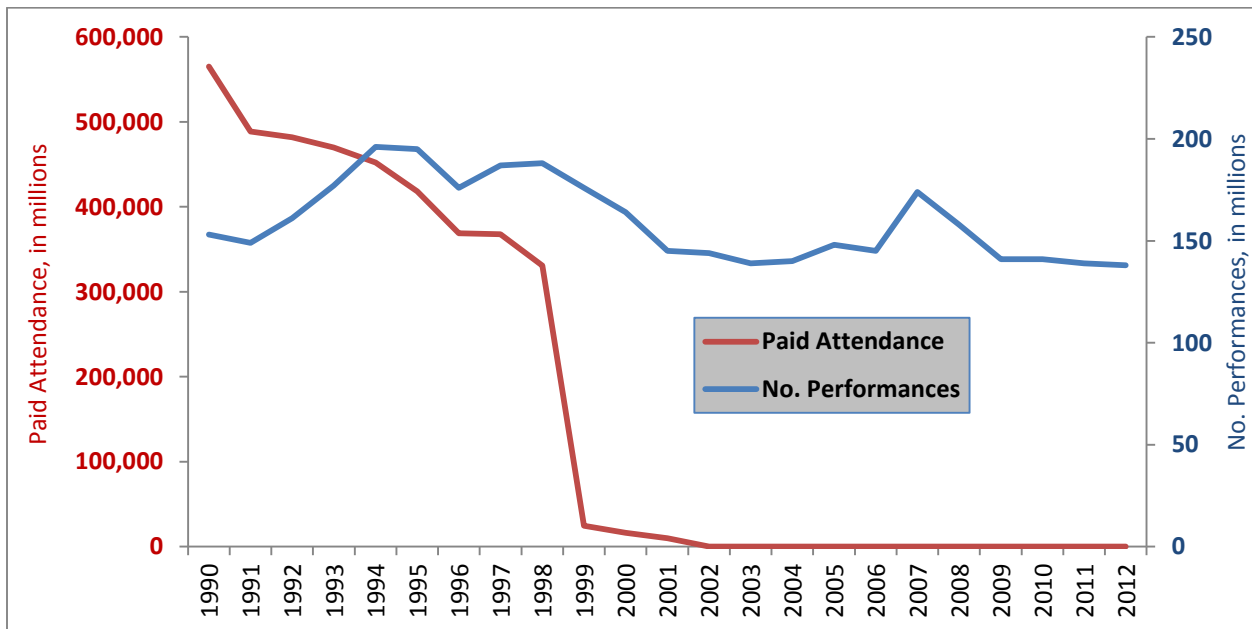
Figure 62: Florida harness racing handle and purses, 1990-2012



Source: Division of Pari-Mutuel Wagering.

Note: Total handle may be understated as PMW does not collect data on out-of-track generated handle, the single largest component of handle.

Figure 63: Florida harness paid attendance and performances, 1990-2012



Source: Division of Pari-Mutuel Wagering.

Note: Pompano has not charged an admission fee since 2002.

e. Quarter Horse

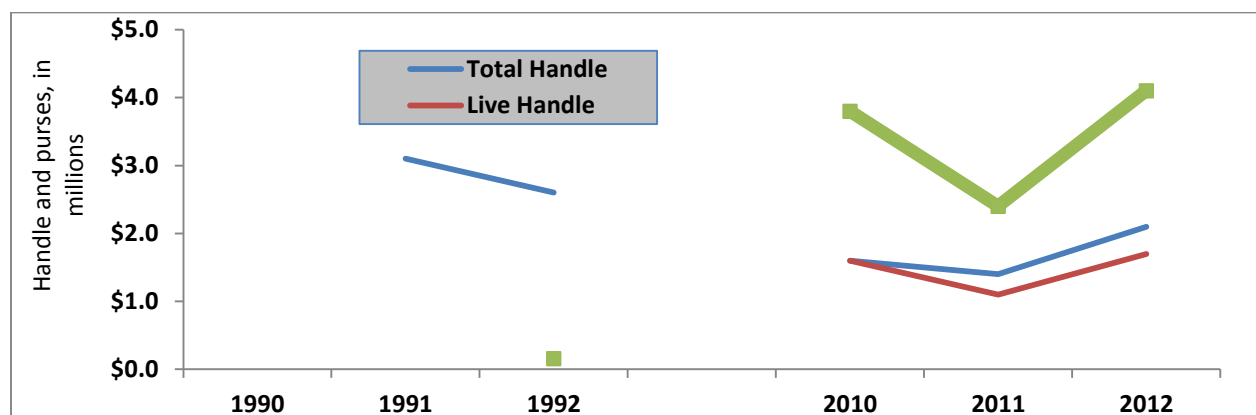
Steve Fisch, president of the Florida Quarter Horse Racing Association, reported that more than 2,300 horses have raced at Hialeah since it reopened as a quarter horse track in 1992. Fisch’s organization has set up an accredited breeding program with the state Department of Agriculture, which rewards Florida-bred quarter horses with additional purse awards for finishing anywhere from first through fourth in races.

Already, Florida has seen some significant impact in breeding activity from the return of quarter horse racing. The number of starters foaled in the state in 2008 was 24. In 2012, the number increased to 96. During the same period, the number of owners of starters who reside in Florida increased from 68 to 247.⁵⁵⁹ Each horse contributes nearly \$35,000 to the GDP in Florida, according to Fisch. Eventually, Fisch expects quarter horse racing to expand to other tracks. The result would be year-round racing. When and if that happens, he envisions a significant increase in breeding activity, handle and purses. Florida, he said, will become one of the top breeding states of quarter horses in the country. The number of starters foaled could exceed more than 2,000, he said.

Fisch noted that in just a few years, the Florida quarter horse industry has gained a reputation for quality race horses and breeding stock, so much so that owners have begun to export mares and stallions to Brazil and Australia. He expects that with the expansion of quarter horse racing to other tracks, the export of quarter horses to foreign countries will become a major industry.

Quarter horse racing returned to Florida in 2010 after a 17-year absence. There are limited data points from 1991-92, as seen in the following chart, which is inclusive of barrel racing:

Figure 64: Florida quarter horse racing handle and purses, 1990-2012



Source: Division of Pari-Mutuel Wagering.

⁵⁵⁹ American Quarter Horse Association, custom report, May 21, 2013.

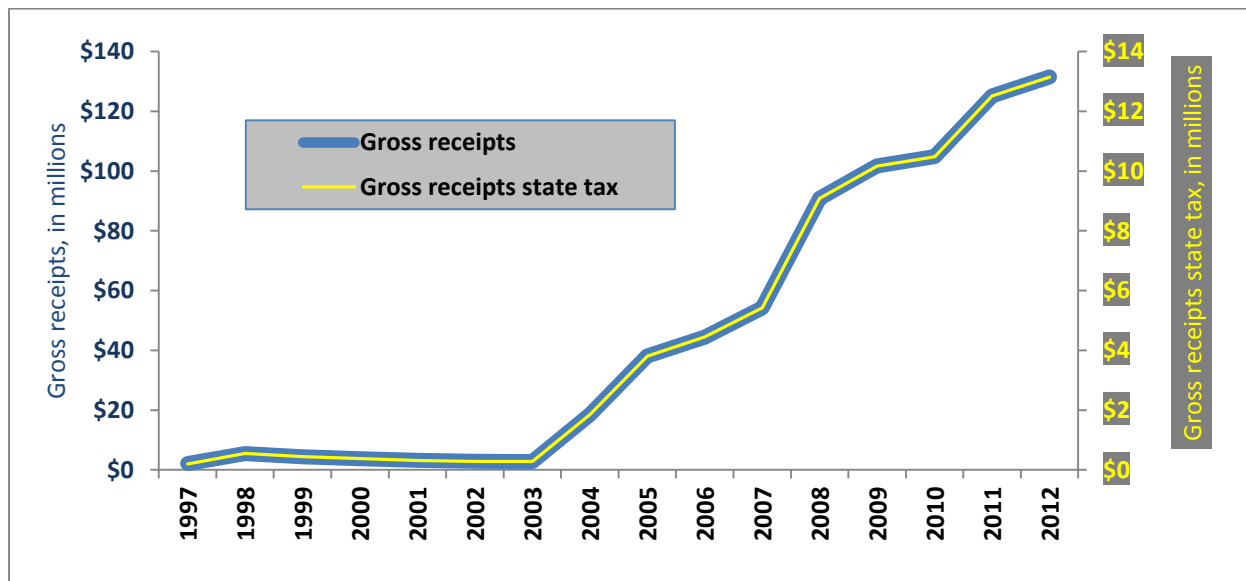
Note: Quarter horse racing was halted in 1992 and returned to Hialeah in 2009 after it received permission to open a slot machine casino.

Quarter horse racing attracted paid attendance of nearly 36,000 in each of 1991 and 1992, but upon its return in 2010 did not charge for admission. The number of performances statewide for the last three years were 40 in 2010, 24 in 2011, and 76 in 2012.

f. Cardrooms

The following chart shows cardroom receipts, along with the state’s share from the 10 percent tax. Cardroom laws were changed in 2003 and then again in 2010 that encouraged professional poker players to play in Florida. The result, as the table shows, was a significant increase in gross receipts and tax revenue. Note that the revenue and tax lines follow identical paths, as the tax rate has stayed the same since inception.

Figure 65: Florida cardroom receipts and state tax, 1997-2012

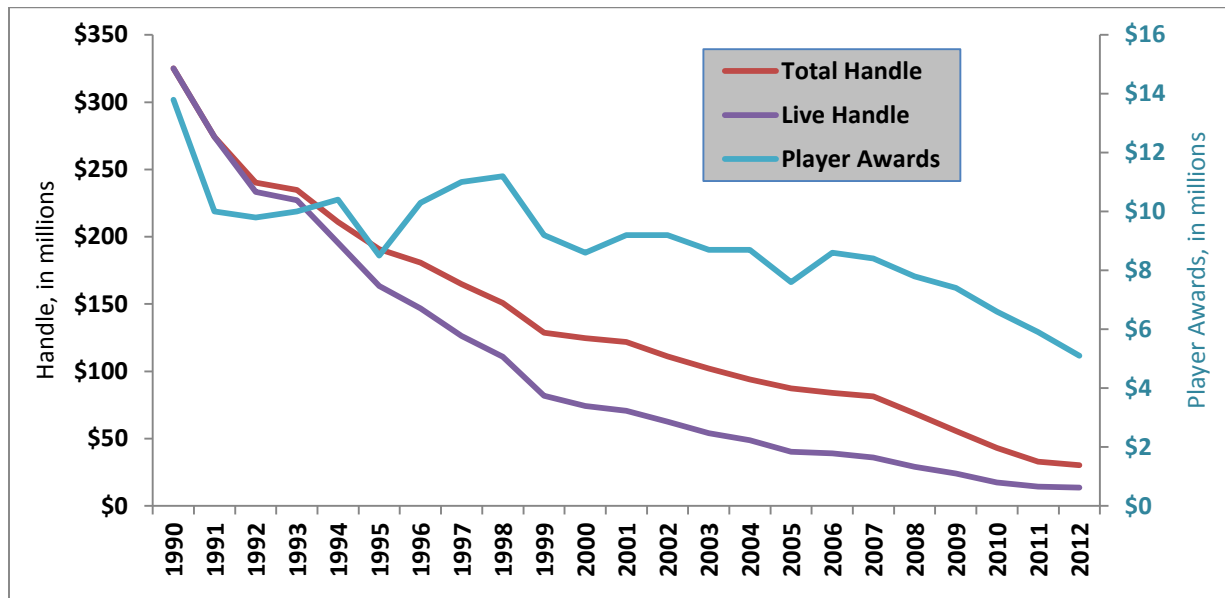


Source: Division of Pari-Mutuel Wagering

g. Jai Alai

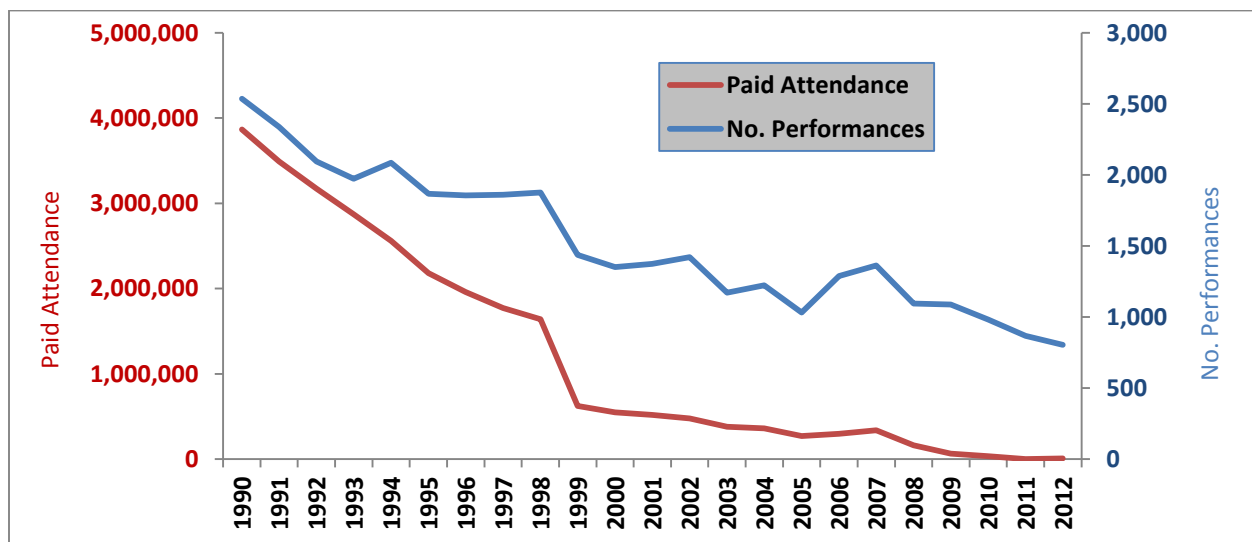
Jai alai is in rapid decline and, effective in 2012, stopped counting admissions. Its 2012 payroll was \$14.2 million, with 70 percent of it at two frontons, Fort Pierce and Miami.

Figure 66: Florida jai alai handle and player awards, 1990-2012



Source: Division of Pari-Mutuel Wagering

Figure 67: Florida jai alai paid attendance and performances, 1990-2012



Source: Division of Pari-Mutuel Wagering

2. Indian Casinos

Through 2011, the Native American casinos collectively had approximately 8,358 employees in both gaming-related and non-gaming capacities – or an average of nearly 1,200 employees per location.⁵⁶⁰ This estimate was reported by a third party, although we know this

⁵⁶⁰ Alan Meister, *Casino City's Indian Gaming Industry Report*, 2012 Edition.

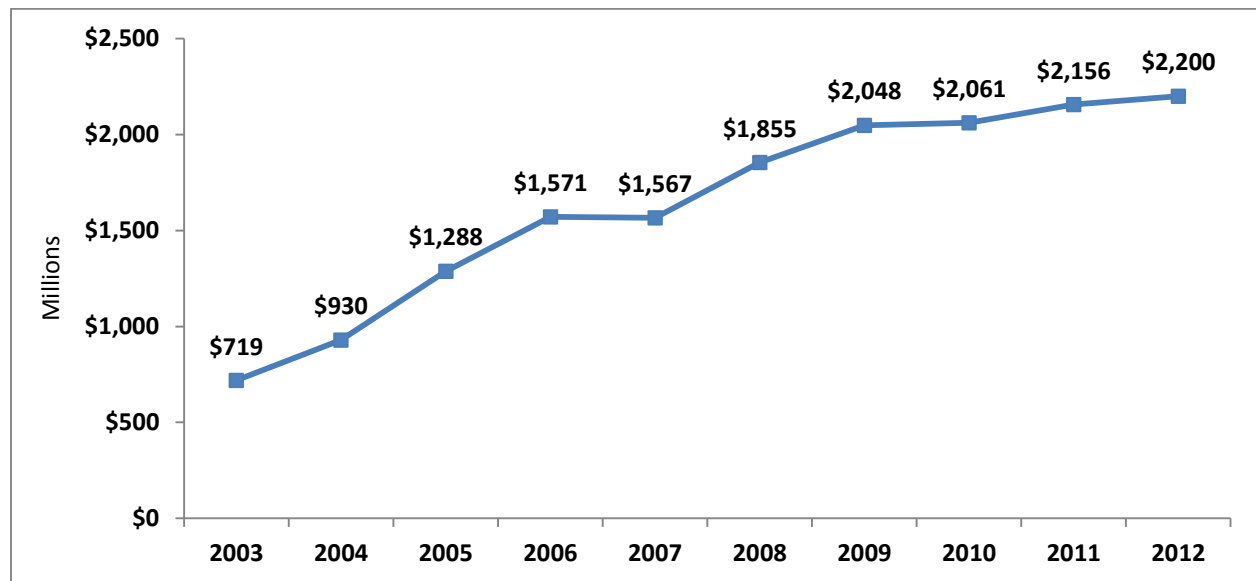
figure may be considerably greater today due to various facility-related expansion activities that have occurred since 2011. In fact, the Seminole Tribe of Florida advised Spectrum that in 2012 its gaming facilities employed 9,562, or 7,725 full-time-equivalent employees. Another 4,000 are employed by Seminole casino tenants, such as retailers who operate on-site outlets.⁵⁶¹ The operator of Florida’s other Native American casino, the Miccosukee Tribe, declined to cooperate with this study, though an employee there advised us that the Miccosukee casino resort employs “over 800.”

We estimate that Native American casinos in Florida had \$2.2 billion of GGR in calendar year ended 2012. We estimate GGR comprised approximately 94.8 percent of total revenue; therefore, we estimate total non-gaming revenue of \$120 million in 2012.⁵⁶²

We note that the Seminole Gaming enterprise, which operates six Florida casinos, generated \$1.96 billion in GGR⁵⁶³ and, based on Spectrum’s estimates, more than \$1.1 billion in EBITDA annually, an estimate that was confirmed in our interviews with management.

The following table shows estimated GGR results for Native American casinos in Florida over the last 10 calendar years, through 2012.

Figure 68: Florida Native American casino GGR, 2003-2012



Source: Casino City’s *Indian Gaming Industry Report*, 2013 Edition

Over this 10-year span, Native American casinos in Florida have generated nearly \$16.4 billion of GGR.⁵⁶⁴ Additionally, and even with the emergence of racinos in South Florida, year-

⁵⁶¹ Interview with Seminole Gaming CEO James Allen, May 1, 2013.

⁵⁶² The average from 2009-2011, as reported in *Casino City’s Indian Gaming Industry Report*, 2013 Edition.

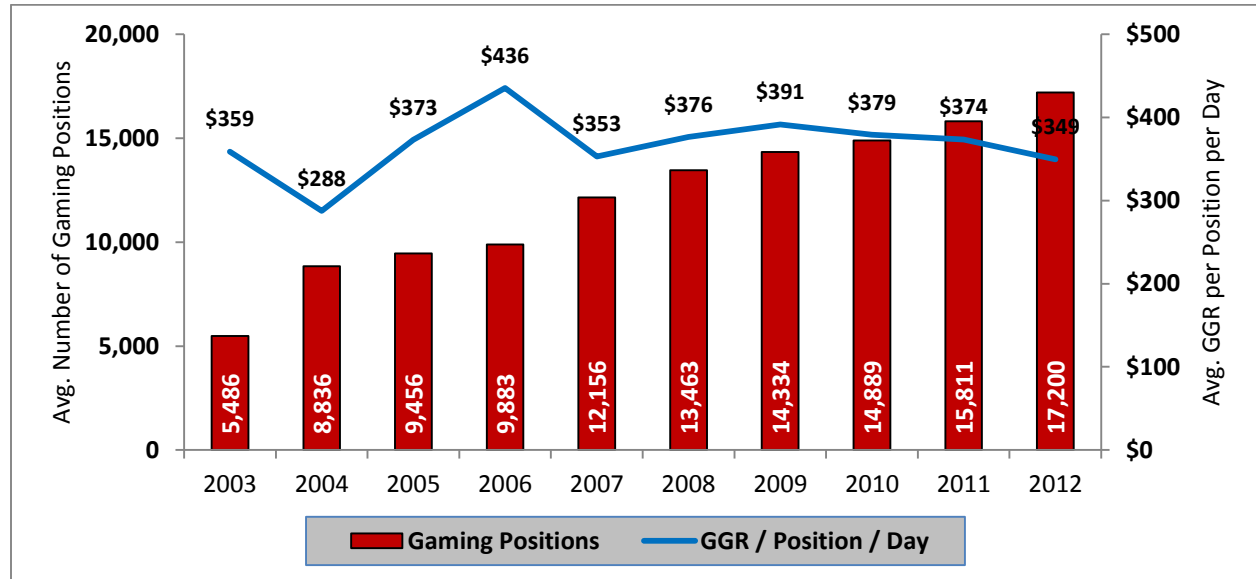
⁵⁶³ Figure provided by Seminole Gaming.

⁵⁶⁴ Alan Meister, *Casino City’s Indian Gaming Industry Report*, 2012 Edition.

over-year GGR growth occurred in nine of the 10 periods illustrated (with exception of 2007 when GGR was down 0.3 percent).

The following chart shows annual average GGR per gaming position per day (estimated) from calendar year ended 2003 through calendar year ended 2012, along with an estimated average number of gaming positions in operation annually.

Figure 69: Florida Native American casino GGR/position/day and counts, 2003-2012



Source: Casino City's *Indian Gaming Industry Report*, 2013 Edition

The following is excerpted from Casino City's *Indian Gaming Industry Report*, 2013 Edition, and provides an explanation of the taxes and/or payments associated with Native American casinos in Florida:

In November 2007, the Seminole Tribe and the Governor of Florida entered into a tribal-state gaming Compact. Upon federal approval in January 2008, the Tribe began making required Compact payment to the State. However, the Compact was challenged by the State Legislature, and in July 2008, the Florida Supreme Court ruled that the Governor did not have the authority to enter into the Seminole gaming Compact without the ratification of the State. Following this ruling, the Tribe entered into a new gaming Compact with the State on April 7, 2010. This Compact was ratified by the State Legislature, and became effective when published in the Federal Register on July 6, 2010. The 2010 Compact calls for several types of payments by the Tribe to the State (note that the State also kept all payments the Tribe made under the original 2007 Compact). The new payments consist of (i) annual revenue sharing payments, 97 percent of which goes to the State and 3 percent goes to local governments; (ii) an annual oversight assessment not to exceed \$250,000 per year (indexed for inflation); and (iii) an annual donation to the Florida Council on Compulsive Gambling in the amount of not less than \$250,000 for each of its seven gaming facilities. The revenue sharing payments, which are made in exchange for exclusivity within the local region, are as follows in the first five years: Years 1 and 2 – \$150 million per year; Years 3 and 4 – the greater of

\$233 million per year or a percentage payment based on Class III net win (i.e., amounts wagered minus prizes/payouts and free play/promotional credits); and Year 5 – \$234 million or a percentage payment based on Class III net win. Percentage payments are based on a sliding scale: 12 percent on net win up to \$2 billion; 15 percent on net win over \$2 billion and up to \$3 billion; 17.5 percent on net win over \$3 billion and up to \$3.5 billion; 20 percent on net win over \$3.5 billion and up to \$4 billion; 22.5 percent on net win over \$4 billion and up to \$4.5 billion; and 25 percent on net win over \$4.5 billion. The Seminole Tribe also makes fixed annual local revenue sharing payments to the City of Coconut Creek.

The same report indicated total direct payments in 2011 (from the Seminole Tribe) were \$154.4 million, of which \$147.3 million (or 95.4 percent) was for state revenue sharing.⁵⁶⁵ We note for the most recent fiscal year (ended June 2012) the state collected \$150 million in revenue sharing from the Seminole Tribe, of which \$3.75 million was distributed to local governments, including both counties and municipalities.⁵⁶⁶ The State subsequently collected \$163.8 million from the Seminole Tribe in FY 2012 and for FY 2013 through June 15, 2013, collected \$174.8 million.

Any assessment of the economic impact of Indian gaming should also consider the alternative: In the absence of this revenue stream, how would tribes such as the Seminoles be able to provide necessary services and funding for their families? Seminole General Counsel Jim Shore told Spectrum that the 3,800 members of his tribe would be living in abject poverty with little hope of escape.⁵⁶⁷

3. Lottery

The Florida Lottery supplies substantial economic benefits and is dedicated to providing assistance to education throughout Florida. The Lottery's mission, as defined in the 2012 annual report, is "To maximize funding for the Educational Enhancement Trust Fund by responsibly providing innovative and entertaining Lottery products and promotions to Florida's citizens and visitors." The Florida Lottery has also been remarkably successful as a gambling business. In 2012 the Lottery's sales totaled \$4.45 billion, surpassing the previous year by 11 percent,⁵⁶⁸ and ranking the Florida Lottery third in the nation in total sales revenue (FY 2011), behind New York and Massachusetts.⁵⁶⁹ This record beating performance enabled the Lottery to transfer

⁵⁶⁵ Meister.

⁵⁶⁶ Florida Department of Business and Professional Regulation, Division of Pari-Mutuel Wagering, 81st Annual Report Fiscal Year 2011-2012, p. 5
<http://www.myfloridalicense.com/dbpr/pmw/documents/AnnualReport2011-2012--81st--revised2013-03-29.pdf>.

⁵⁶⁷ Interview with Jim Shore, May 1, 2013.

⁵⁶⁸ Florida Lottery, "Brighter Than Ever," Annual Report, 2011-2012
<http://www.flalottery.com/exptkt/annualreport11-12.pdf>.

⁵⁶⁹ Teresa Markle La Fleur, Byron la Fleur, *La Fleur's 2012 World Lottery Almanac*, p. 259.

\$1.32 billion to the Educational Enhancement Trust Fund (“EETF”). The Florida Lottery is also one of the more efficient state lotteries in the United States, ranking consistently in the top quartile by the measurement ratio of administration as a percentage of ticket sales.⁵⁷⁰

The Florida Lottery’s contributions to education are considerable. Since its inception, the Lottery has provided a total of \$24 billion to the EETF.⁵⁷¹ In the past fiscal year the EETF has allocated \$317 million for construction bonds, provided \$271 million for public school finding, \$130 million for state colleges, and \$254 million for state universities.⁵⁷² Since 1997 the Florida Lottery has also provided scholarships to more than 600,000 students through the Bright Futures Scholarship Program, funded primarily through Lottery financial transfers. These contributions yield subsequent results, tangible and intangible, in the quality of Floridian’s lives which are impossible to fully quantify yet undeniable nonetheless.

Beyond sales revenue, and transfers to educational assistance the economic impact of the Lottery within the state of Florida is substantial. The Florida Lottery directly employs 420 full-time-equivalent employees. The Lottery is a critical partner to the widespread sales network of 13,300 lottery retailers. Most of these retailers are small independent businesses employing thousands of Florida citizens and providing essential goods and services to local communities. As part of its recent work with the Massachusetts State Lottery, Spectrum conducted a survey among lottery retailers which showed that, on average, each of the 7,400 retailers in the Commonwealth employs two or three people, often at the entry level, in a very wide range of small business enterprises.⁵⁷³ From an economic perspective, lottery revenue was estimated by retail sales agents to account for a median 25 percent of total business revenues.⁵⁷⁴ In Florida, retail lottery sales are generated primarily from convenience stores with gas pumps (48 percent), supermarkets (27 percent), convenience stores without gas pumps (17 percent), package liquor stores (3 percent), small grocery markets (1.5 percent), dollar/discount stores (1 percent), and newsstand/ tobacconist/sundries (1 percent).⁵⁷⁵ With the exception of supermarkets, the great majority of these establishments are local small business enterprises.

⁵⁷⁰ Lottery Revenue and Design by State, National Conference of State Legislatures, 2006, <http://www.ncsl.org/issues-research/econ/lottery-payouts-and-state-revenue.aspx>.

⁵⁷¹ Florida Lottery, “Brighter Than Ever,” Annual Report, 2011-2012 <http://www.flalottery.com/exptkt/annualreport11-12.pdf>.

⁵⁷² Ibid.

⁵⁷³ Spectrum Gaming Group, *Facing The Lottery’s Future*, December 4, 2012, Amended January 8, 2013 <http://www.masslottery.com/lib/downloads/leadership/pdfs/SpectrumGamingGroupFinalReport12-4-12Ammended.pdf>.

⁵⁷⁴ Ibid.

⁵⁷⁵ Florida Lottery, “Brighter Than Ever.”

4. Charitable Bingo

As discussed in Chapter II (B)(9), bingo conducted for charitable purposes is regulated at the county or municipal level and no state agency or organization aggregates the gross or net bingo revenue. Spectrum is unaware of even credible estimates as to the dollar size of the Florida charitable bingo market. As noted, there is no direct employment associated with charitable bingo, as the activity is operated by volunteers who are members of the recipient charity. In the bingo halls we observed, the facility's owner/operator and any other compensated employees are paid by revenues derived from facility's food concessions. Thus charitable bingo is captured in the fundraising and grant-making activities of the recipient charities, which is outside of our gaming-impact analysis model.

5. Assessing Florida's Existing Economic Base, Now and Future

As noted in the Introduction, Spectrum works with Regional Economic Models Inc. ("REMI") to calculate the economic impacts of Florida's gambling industry. The existing gambling industry spans across three sectors within the REMI model: Amusement, Gambling, and Recreation Industries (North American Industry Classification System, or "NAICS," 713), Accommodation (NAICS 721), and Retail Trade (NAICS 44-45). The following tables show five main economic indicators of these three aggregate sectors from calendar years 2000 through 2060, in five-year increments.

Figure 70: Past, present, future economic indicators of Amusement, Gambling, and Recreation Industries (including racinos, pari-mutuel, lottery)

NAICS 713	Units	2000	2005	2012	2015	2020	2025	
Employment	Thousands (Jobs)	139.944	157.519	175.462	184.931	198.716	208.514	
Output	Billions of Fixed (2012) Dollars	11.993	11.779	12.028	12.824	14.077	15.257	
Value Added	Billions of Fixed (2012) Dollars	8.071	7.576	7.596	8.089	8.946	9.805	
Wage & Salary	Billions of Current Dollars	3.14	4.078	5.269	6.129	7.763	9.967	
Compensation	Billions of Current Dollars	3.617	4.69	6.019	7.014	8.982	11.559	
NAICS 713	Units	2030	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	216.153	221.982	224.191	224.105	221.768	218.112	213.268
Output	Billions of Fixed (2012) Dollars	16.338	17.332	18.078	18.659	19.057	19.331	19.48
Value Added	Billions of Fixed (2012) Dollars	10.497	11.052	11.433	11.697	11.834	11.886	11.853
Wage & Salary	Billions of Current Dollars	12.374	15.118	18.125	21.485	25.124	29.193	33.655
Compensation	Billions of Current Dollars	14.377	17.59	21.111	25.041	29.288	34.028	39.218

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 71: Past, present, future economic indicators of Accommodation (including Indian casinos)

NAICS 721	Units	2000	2005	2012	2015	2020	2025	
Employment	Thousands (Jobs)	162.766	167.140	177.415	184.386	189.593	191.554	
Output	Billions of Fixed (2012) Dollars	15.755	18.85	22.056	24.01	26.708	29.508	
Value Added	Billions of Fixed (2012) Dollars	9.465	11.064	14.686	15.988	17.954	20.079	
Wage & Salary	Billions of Current Dollars	3.566	4.585	5.382	6.156	7.431	9.158	
Compensation	Billions of Current Dollars	4.078	5.312	6.273	7.186	8.767	10.828	
NAICS 721	Units	2030	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	195.676	200.905	203.795	205.729	207.060	208.440	210.048
Output	Billions of Fixed (2012) Dollars	32.977	37.06	41.156	45.487	50.112	55.192	60.811
Value Added	Billions of Fixed (2012) Dollars	22.425	24.99	27.482	30.041	32.702	35.556	38.637
Wage & Salary	Billions of Current Dollars	11.176	13.623	16.372	19.561	23.22	27.566	32.695
Compensation	Billions of Current Dollars	13.236	16.155	19.433	23.23	27.577	32.732	38.806

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 72: Past, present, future economic indicators of Retail Trade (including retail lottery)

NAICS 44-45	Units	2000	2005	2012	2015	2020	2025	
Employment	Thousands (Jobs)	1,071.790	1,149.132	1,153.883	1,199.357	1,244.712	1,228.356	
Output	Billions of Fixed (2012) Dollars	65.668	83.901	85.927	95.702	111.673	125.167	
Value Added	Billions of Fixed (2012) Dollars	44.918	57.692	62.064	69.026	81.117	91.933	
Wage & Salary	Billions of Current Dollars	21.183	27.006	29.526	33.752	41.068	49.285	
Compensation	Billions of Current Dollars	24.856	32.663	35.253	40.358	49.633	59.681	
NAICS 44-45	Units	2030	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	1,204.670	1,174.574	1,123.288	1,060.127	990.560	920.639	848.663
Output	Billions of Fixed (2012) Dollars	139.374	154.272	167.443	179.274	189.930	200.043	208.829
Value Added	Billions of Fixed (2012) Dollars	102.344	112.439	121.063	128.511	134.910	140.717	145.392
Wage & Salary	Billions of Current Dollars	57.483	66.200	74.607	82.881	90.824	98.982	106.767
Compensation	Billions of Current Dollars	69.704	80.353	90.608	100.668	110.283	120.119	129.465

Source: Regional Economic Models Inc., Spectrum Gaming Group

Combined with data from the County Business Patterns (“CBP”) by the US Census Bureau and an assessment of the gambling industry in Florida by Spectrum, REMI was able to estimate the historical and current share of the gambling industry within the three aggregate sectors. The CBP publishes paid-employees and payroll data for both Gambling Industries (NAICS 7132), Casino Hotels (NAICS 72112), Food and Beverage Stores and Convenience Stores (NAICS 445 and NAICS 445120, respectively), which we categorized as subsectors of Amusement, Gambling, and Recreation Industries, Accommodation, and Retail Trade, respectively. REMI and Spectrum divided the casino gaming industry into four main groups: racinos/pari-mutuels, lottery, retail lottery, and Native American casinos. *The racinos/pari-mutuels and lottery⁵⁷⁶ have been assigned to the Amusement, Gambling, and Recreation*

⁵⁷⁶ The “Lottery” in this report represents the Florida Lottery.

Industries, the Native American casinos to Accommodation, and retail lottery⁵⁷⁷ to Retail Trade, based on the nature of the subsectors.

The Census Bureau withholds data for certain industries to avoid disclosing data for individual companies; casino hotels in Florida comprise one of the industries heavily affected by nondisclosure. The following tables show historical data for the gaming industries.

Figure 73: Historical data for Gambling Industries (including racinos, pari-mutuel, lottery)

NAICS 7132	Units	2000	2001	2002	2003	2004	2005
Employment	Thousands (Jobs)	3.582	4.474	4.861	5.079	5.754	6.691
Payroll (Wage and Salary)	Thousands of Current Dollars	72,448	99,951	98,203	108,508	140,762	166,403
NAICS 7132	Units	2006	2007	2008	2009	2010	2011
Employment	Thousands (Jobs)	6.286	6.134	4.284	3.984	3.271	3.071
Payroll (Wage and Salary)	Thousands of Current Dollars	182,141	185,584	109,674	106,806	88,094	95,493

Source: Regional Economic Models Inc., Spectrum Gaming Group, US Census Bureau, County Business Patterns (NAICS) 2000-2011

Figure 74: Historical data for Casino Hotels (including Indian casinos)

NAICS 72112	Units	2000	2001	2002	2003	2004	2005
Employment	Thousands (Jobs)	0.004	a	a	b	c	g
Payroll (Wage and Salary)	Thousands of Current Dollars	114	D	D	D	D	D
NAICS 72112	Units	2006	2007	2008	2009	2010	2011
Employment	Thousands (Jobs)	g	g	4.392	6.374	i	i
Payroll (Wage and Salary)	Thousands of Current Dollars	D	D	174,224	249,294	D	D

Source: Regional Economic Models Inc., Spectrum Gaming Group, United States Census Bureau, County Business Patterns (NAICS) 2000-2011.

Note: D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals. a: 0-19 employees; b: 20-99 employees; c:100-249 employees; f: 500-999 employees; g: 1,000-2,499 employees; i: 5,000-9,999 employees

Figure 75: Historical data for Food & Beverage Stores and Convenience Stores (including retail lottery)

NAICS 445 and NAICS 447110	Units	2000	2001	2002	2003	2004	2005
Employment	Thousands (Jobs)	248.085	243.538	236.07	240.927	238.916	242.212
Payroll (Wage and Salary)	Thousands of Current Dollars	3,618,168	3,715,863	3,711,384	3,893,294	4,088,928	4,484,231
NAICS 445 and NAICS 447110	Units	2006	2007	2008	2009	2010	2011
Employment	Thousands (Jobs)	245.601	232.16	224.011	214.701	215.802	217.032
Payroll (Wage and Salary)	Thousands of Current Dollars	4,549,470	4,379,388	4,434,397	4,401,704	4,359,217	4,326,674

Source: Regional Economic Models Inc., Spectrum Gaming Group, United States Census Bureau, County Business Patterns (NAICS) 2000-2011.

The Spectrum casino gaming assessment provides payroll data and gross gaming revenues at racinos/pari-mutuels in 2012; payroll data, gross gaming revenues and employees are available for Native American casinos in 2012; and payroll, revenue, and employee data for the lottery are available for 2012, as are the estimated employment and revenue data for retail lottery in 2012. The Florida Department of Business & Professional Regulation also provided the FY

⁵⁷⁷ The "Retail Lottery" in this report refers to the retailers selling lottery tickets.

2012 regulatory costs (in total) for pari-mutuels (includes pari-mutuel racing, cardrooms, slots, and gaming Compact oversight expenditures).

We estimated the number of employees in racinos/pari-mutuels by dividing the total payroll amount by the average annual wage and salary in the Amusement, Gambling, and Recreation Industries. Having both the gross gaming revenue and employee number allows us to calculate a baseline for the labor productivity (output per employee) for racinos, lottery, retail lottery, and Native American casinos. The following tables show the various data collected and estimated for the gaming industry in 2012.

Figure 76: Racino employees, gross gaming revenue, wage and salary, and regulatory costs 2012

Racinos/Pari-Mutuels (NAICS 713290)	Units	2012
Racinos/Pari-Mutuels Employees	Thousands (Jobs)	4.954
Racinos/Pari-Mutuels Gross Gaming Revenue	Millions of Fixed (2012) Dollars	527.6
Racinos/Pari-Mutuels Wage & Salary	Millions of Fixed (2012) Dollars	148.777
Racinos/Pari-Mutuels Regulatory Costs (FY 2012)	Millions of Fixed (2012) Dollars	17.927

Source: Regional Economic Models Inc., Spectrum Gaming Group, Florida Department of Business Professional Regulation.

Note: Wage and salary is exclusive of payroll taxes, benefits, etc.

Figure 77: Lottery employees, gross gaming revenue, and compensation, 2012

Lottery (NAICS 713290)	Units	2012
Lottery Employees	Thousands (Jobs)	0.408
Lottery Gross Ticket Sales ⁵⁷⁸	Millions of Fixed (2012) Dollars	4449.896
Lottery Compensation	Millions of Fixed (2012) Dollars	25.164

Source: Regional Economic Models Inc., Spectrum Gaming Group.

Note: Compensation is inclusive of payroll taxes, benefits, etc.

Figure 78: Retail lottery employees and revenue, 2012

Retail Lottery (NAICS 445 & NAICS 447110)	Units	2012
Retail Lottery Employees	Thousands (Jobs)	39.900*
Retail Lottery Revenue	Millions of Fixed (2012) Dollars	247.690

Source: Regional Economic Models Inc., Spectrum Gaming Group.

*Note: The Florida Lottery retail network totals 13,300 establishments. We assumed an average of three employees per lottery retailer who were hired as a result of the establishment selling lottery tickets, based on our 2012 Massachusetts retailer survey (n=3,976).

Figure 79: Native American casino employees, gross gaming revenue and compensation, 2012

Native American Casinos (NAICS 72112)	Units	2012
Native American Casinos Employees	Thousands (Jobs)	10.387
Native American Casinos Gross Gaming Revenue	Millions of Fixed (2012) Dollars	2,200
Native American Casinos Compensation	Millions of Fixed (2012) Dollars	348.986

Source: Regional Economic Models Inc., Spectrum Gaming Group

With this information, we were able to establish the gambling industry's share within the three aggregate sectors. This information is essential to the following section as we carry out a

⁵⁷⁸ Lottery gross ticket sales shown in this table is the dollar value of tickets sold; the lottery revenue used in Tax-PI for this study represent the net sales (after prizes are paid out)

counterfactual analysis that involves removing the employment and its associated wages and output to determine the total economic and fiscal contribution of the gambling industry. The gambling industry is unique because it typically has higher labor productivity than its aggregate sector. This is evident in the following table, showing the Racinos/Pari-mutuels employment is approximately 2.8 percent of the total employment and wage and salary in the Amusement, Gambling, and Recreation Industries. However, the Racinos/Pari-mutuels output is 4.4 percent of the total Amusement, Gambling, and Recreation Industries output. We have to take into account this higher labor productivity of the gaming subsectors when we do the counterfactual analysis.

The Casino Hotels shows a similar pattern, in which the employment and associated compensation make up about 5.5 percent of the Accommodation sector, but its output is over 10 percent of the Accommodation output.

The Lottery sector (excluding retailers) has uniquely high labor productivity due to its operation design. Lottery revenues make up nearly 38 percent of the Amusement, Gambling, and Recreation Industries' total output but less than 1 percent of employment and compensation of the Amusement, Gambling, and Recreation Industries. Typically, a lottery control board oversees the operation and sells lottery tickets through sales agents (retailers). Once the lottery operation is established, the administrative cost remains largely the same. The marginal cost for producing an additional dollar of lottery sales is very low compared to other goods and services, hence the high productivity. That being said, in this report we do not adjust for labor productivity in the Lottery sector because the entirety of lottery sales (after prize payouts) transfers to state revenues. Instead, we remove the net lottery sales through the revenue module in Tax-PI to perform the counterfactual analysis for the Lottery sector.

Spectrum has studied the lottery business model in multiple states, including its retail distribution model. We noted the following in a 2012 report for the Massachusetts State Lottery:

Many sales agents are first-generation immigrants to the United States. They view retailing in general, and the Lottery in particular, as important rungs on the ladder toward economic success and independence. ... While we suspect that the present Lottery distribution system was not designed as an economic ladder for retailers and their families, it has nonetheless evolved into precisely that.⁵⁷⁹

The Retail Lottery sector, on the other hand, behaves differently than the Lottery sector. According to *La Fleur's 2012 Lottery Almanac*,⁵⁸⁰ over 95 percent of the lottery sales occur at gas stations with convenience stores, standalone convenience stores, supermarkets, and liquor stores. These businesses primarily engage in providing other goods and services aside from the lottery. Lottery sales are a supplement to these businesses, and commission on lottery ticket sales makes up only a fraction of their total revenue, which would explain why lottery sales make up just 0.3 percent of the output of the Retail Trade industry.

⁵⁷⁹ Spectrum Gaming Group, *Facing The Lottery's Future*, p. 75.

⁵⁸⁰ *La Fleur's 2012 World Lottery Almanac*, p. 66.

Figure 80: Subsectors as percentages of respective aggregate sectors

	2012
Racinos/Pari-mutuels Employment as Percentage of NAICS 713 Employment	2.82%
Racinos/Pari-mutuels Wage and Salary as Percentage of NAICS 713 Wage and Salary	2.82%
Racinos/Pari-mutuels Output as Percentage of NAICS 713 Output	4.39%
Lottery Employment as Percentage of NAICS 713 Employment	0.23%
Lottery Compensation as Percentage of NAICS 713 Compensation	0.42%
Lottery Output as Percentage of NAICS 713 Output	37.00%
Retail Lottery Employment as Percentage of NAICS 44-45 Employment	3.46%
Retail Lottery Compensation as Percentage of NAICS 44-45 Compensation	3.46%
Retail Lottery Output as Percentage of NAICS 44-45 Output	0.29%
Native American Casinos Employment as Percentage of NAICS 721 Employment	5.85%
Native American Casinos Compensation as Percentage of NAICS 721 Compensation	5.56%
Native American Casinos Output as Percentage of NAICS 721 Output	9.97%

Source: Regional Economic Models Inc., Spectrum Gaming Group

a. Historical Tax Revenue by Gaming Sectors

The Office of Economic and Demographic Research (“EDR”) of the Florida Legislature provided REMI with historical tax revenue information, allowing us to examine the historical trend of tax revenue collection from each of the gaming sectors. The following table displays the tax collection, dating from FY 2000.

	Units	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06
Indian Gaming	Millions of Current Dollars	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pari-mutuel Fees, Licenses, Taxes Total	Millions of Current Dollars	57.5	34.7	35.1	32.4	32.1	32.0	33.6
Slot Machine Total	Millions of Current Dollars	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lottery Total	Millions of Current Dollars	1,159.5	1,157.3	1,181.0	1,327.6	1,361.9	1,393.4	1,639.3
	Units	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	
Indian Gaming	Millions of Current Dollars	0.0	0.0	0.0	287.5	140.4	150.0	
Pari-mutuel Fees, Licenses, Taxes Total	Millions of Current Dollars	33.9	33.8	29.2	26.6	26.0	26.9	
Slot Machine Total	Millions of Current Dollars	61.6	132.3	114.0	153.0	149.4	156.5	
Lottery Total	Millions of Current Dollars	1,681.0	1,602.5	1,590.8	1,550.7	1,506.9	1,671.3	

Source: The Office of Economic and Demographic Research of the Florida Legislature

Note: The Lottery Total excludes lottery prizes, which is consistent with the calibrated budget used within Tax-PI.

Discussion of Components of Economic and Fiscal Impacts

A description of the direct, indirect, and induced components of the economic and fiscal impact of each of the subsectors. Impacts associated with facility construction should be distinguished from impacts associated with ongoing operation of a facility.

Using the employment, output, wage and salary, tax revenue, and regulatory costs data from Chapter III(A) above, we performed a counterfactual analysis using the REMI Tax-PI model to evaluate the contribution of the gambling industry as it existed in Florida in 2012. For

this modeling effort, the Legislature’s EDR provided REMI with a national benchmark based upon Global Insight June 2013 Control Forecast, a state benchmark based upon population estimates from Florida’s February 2013 Economic Estimating Conference, and employment estimates from September 2012 US BEA historical ES-202 data in order to correctly calibrate model baseline. EDR also provided REMI its latest customized budget for Tax-PI to ensure the fiscal module of the Tax-PI is properly calibrated.

To create a customized budget in Tax-PI, a user begins by including at least one year of revenue and expenditure into the budget. EDR included its FY 2013 budget data for its current Tax-PI model. Next, each revenue item must be assigned an economic indicator. For Indian Gaming revenue, EDR established a time series forecasting the growth of the revenue. For pari-mutuel fees, licenses, and taxes, EDR elected to drive the revenue forecast by the demand of the Amusement, Gambling, and Recreation Industries. The slot machine fees, licenses, and taxes revenue forecast is also driven the by the demand of the Amusement, Gambling, and Recreation Industries. Lastly, EDR chose to use personal consumption expenditure on gambling to drive the lottery revenue forecast.

The user can choose whether the expenditures will be determined by revenues or demand. Florida has a balanced budget requirement and thus EDR selected the “Expenditures Determined by Revenues” option in its budget. EDR then created a mapping from each of the revenue categories to each of the expenditure categories. It specified the percentage of each revenue source that is associated with each expenditure category. For example, EDR has 77.8 percent of the lottery revenue mapped to education expenditures and the remaining 22.2 percent is mapped to general government spending. All revenue sources must be mapped to expenditure categories, so by definition the sum of all expenditures will equal the sum of all revenues. (For further information about the methodology of the Tax-PI model, please see Appendix II.)

The REMI model forecasts the economy out to 2060 to allow analysts to evaluate any changes to the baseline. The gambling industry is already presented in the baseline forecast because it is a component in the current Florida economy. In this study, we are not trying to measure the contribution of the gambling industry *on top of* the existing gambling activities in the Florida baseline. Rather, the objective is to understand the impacts of the gambling *as it exists currently*. In other words, what are the impacts to Florida if the gambling industry did not exist? Employing the counterfactual requires that we *remove the employment, associated output, wage & salary, tax revenue, as well as Floridians’ out-of-state gaming spending* to simulate the loss of the gambling industry in Florida. This approach allows us to measure the direct, indirect, and induced contribution of the existing gambling industry to the overall economy in 2012.

It is also important to consider the substitution effect of gaming spending in this counterfactual analysis. If households did not spend on gambling-related expenses, this spending would not simply disappear from the economy. Rather, we assume these consumers would have spent those dollars on other goods and services. In this analysis, we assume 95 percent of the GGR to the pari-mutuel casinos was from Florida residents, 85 percent of Native American

casino GGR was from Florida residents, and 98 percent of total lottery sales were from Florida residents. The full amount of GGR attributable to Florida residents is available for redistribution to various consumption categories. However, some of this money will also leak out of the state due to residents’ continued desire to partake in gambling activities. The following few pages outline the methodology used to account for the substitution effects.

To estimate how much Floridians would be spending in other gaming markets were casinos not available in Florida, we look back to data from 2005, prior to the authorization of racinos and Class III gaming. According to *Profile of the American Casino Gambler: Harrah’s Survey 2006*, the percentage of adults who gambled at least once in a casino in the previous 12 months (or in 2005) was approximately 25.2 percent.⁵⁸¹ Importantly, this figure includes all of the US adult population – those who lived nearby to casinos, as well as those who did not.

According to the *Harrah’s Survey*, of the top 20 largest feeder markets (to casinos) in the US, three were in Florida: Miami-Ft. Lauderdale, Tampa-St. Petersburg-Sarasota, and Orlando-Daytona Beach-Melbourne.⁵⁸² These three areas were aggregated by Designated Market Area (“DMA”), a term that generally refers to media markets, and included 22 of Florida’s 67 counties, and approximately two-thirds of Florida’s population. Based on the data compiled, the casino participation rate in Florida for these three DMAs, and aggregated, was approximately 23.1 percent in 2005 – as illustrated in the following table.

Figure 81: Florida 2005 casino participation rate in three largest designated market areas

2005 Population & Casino Participation figures, by DMA	Population	Adults (21+)	Casino Participation Rate	Casino Participants
Miami-Ft. Lauderdale	4,214,836	3,073,237	30.0%	921,971
Tampa-St. Petersburg-Sarasota	4,108,872	3,047,370	17.0%	518,053
Orlando-Daytona Beach-Melbourne	3,405,849	2,451,383	22.0%	539,304
Total (the three DMAs):	11,729,557	8,571,990	23.1%	1,979,328

Source: Harrah’s Entertainment, U.S. Census Bureau

Importantly, although this period was before the expansion of casinos in Florida, we do see that the Miami-Ft. Lauderdale DMA had a much higher casino participation rate than the other two DMAs in Florida, as well as a rate higher than the national average.

According to the *Harrah’s Survey*, the Atlanta DMA (Georgia) was one of the nation’s top feeder markets and had a casino participation rate of 15 percent.⁵⁸³ There were no casinos operating in Georgia (and still are not). The closest casinos to the Atlanta DMA at the time were well beyond a two-hour drive – the most recognizable being Harrah’s Cherokee in North Carolina (and with Class II gaming). Similarly, the Washington, DC, DMA was one of the

⁵⁸¹ Harrah’s Entertainment Inc., *Profile of the American Casino Gambler: Harrah’s Survey 2006*.

⁵⁸² Ibid.

⁵⁸³ Ibid.

nation's top feeder markets and had a casino participation rate of 17 percent.⁵⁸⁴ The closest casino to the Washington DMA at the time was beyond a one-hour drive from the bulk of the Washington DMA (in West Virginia), while there were no other casinos operating within a reasonable three-hour drive at that time.

Using the Atlanta and Washington DC DMAs as a benchmark, we assume the remainder of Florida's adults (those outside of the Miami-Ft. Lauderdale, Tampa-St. Petersburg-Sarasota, and Orlando-Daytona Beach-Melbourne DMAs) had a casino participation rate of 15 percent in 2005. Combining this population, and casino participation data, with the actual casino participation rates for the Miami-Ft. Lauderdale, Tampa-St. Petersburg-Sarasota, and Orlando-Daytona Beach-Melbourne DMAs yields an overall casino participation rate for Florida of approximately 20.3 percent in 2005, as shown in following table.

Figure 82: Florida 2005 casino participation rate in three largest designated market areas and statewide

2005 Population & Casino Participation figures, by DMA	Population	Adults (21+)	Casino Participation Rate	Casino Participants
Miami-Ft. Lauderdale	4,214,836	3,073,237	30.0%	921,971
Tampa-St. Petersburg-Sarasota	4,108,872	3,047,370	17.0%	518,053
Orlando-Daytona Beach-Melbourne	3,405,849	2,451,383	22.0%	539,304
Total (DMAs - 22 counties):	11,729,557	8,571,990	23.1%	1,979,328
Balance of FL (45 counties)	6,048,599	4,609,766	15.0%	691,465
Grand Total - Florida	17,778,156	13,181,756	20.3%	2,670,793

Source: Harrah's Entertainment, US Census Bureau, University of Florida, Bureau of Economic and Business Research (May 2011), Florida Demographic Estimating Conference (November 2011)

Note: Florida's adult population (21+) percentage estimated for 2005 as mid-point between 2000 and 2010 US Census Bureau data.

Florida's Native American casinos in 2005 had estimated GGR of \$1.29 billion; all were Class II operations at the time.⁵⁸⁵ We assume that 90 percent of this GGR came from Florida residents, or \$1.16 billion.

Fast forward to 2012, by which time the US casino landscape had expanded considerably. The reported US casino participation rate was 32 percent and overall GGR at casinos (both commercial and Native American) was approximately \$65 billion.⁵⁸⁶ This total GGR divided by number of adults who were active gamblers translates into average annual GGR of \$904 per casino gambler in 2012.

If we assume that slots at Florida pari-mutuels would not exist today, and that Florida's Native American casinos remained limited to Class II operations, and we apply the 2005 casino

⁵⁸⁴ Ibid.

⁵⁸⁵ Alan Meister, *Casino City's Indian Gaming Industry Report*, 2013 Edition.

⁵⁸⁶ *2013 State of the States*.

participation rate to the estimated 2012 number of adults in Florida, this would translate into approximately 2.96 million active casino gamblers in Florida in 2012. Further applying the US average GGR per casino gambler (of \$904 in 2012) to Florida gamblers yields \$2.67 billion of GGR (casino only) that we believe could have been reasonably generated by Florida adults in 2012. Assuming the status quo for Native American casinos in Florida (i.e., GGR remains at 2005 level for 2012), this translates into \$1.514 billion of potential GGR that we assume would have been exported out of state in the absence of Florida racinos or Class III casinos.

We estimated that approximately \$500 million of GGR is already being exported to other states by Floridians (see Chapter III[B][1]), so we can assume that \$1 billion in additional out-of-state gambling by Florida adults would occur annually in the absence of racinos or Class III casinos.

We believe it is reasonable that casinos along the Gulf Coast of Mississippi, as well as those in Las Vegas, Atlantic City, and the Bahamas/Caribbean, would be the primary beneficiaries of this GGR stream from Florida adults.

In addition to out-of-state gambling spending, residents would have other gambling-trip-related spending as well. If we assume that Floridians would be gambling more out of state in the absence of Florida casinos, we can also assume that the overwhelming majority would be flying to distant destinations. (For the Floridians who drive to casinos in nearby states, those out of state casinos would largely still be the most convenient option.)

With that in mind, we suggest the following would account for additional non-gaming spending that would accompany such visits by air. These estimates are based on the most recent visitor profile published by the Las Vegas Convention & Visitors Authority,⁵⁸⁷ which we suggest would reflect spending patterns in other distant locales as well. These would be, in addition to gambling budgets, dollars that would not be spent in Florida:

Figure 83: Estimated non-gaming trip expenditures by Floridians in absence of in-state casinos

	Average spend (2012)
Air/lodging package	\$743.65
Shopping, shows, sightseeing	\$175.52
Food and beverage	\$323.05
Local transportation	\$223.05
Total	\$1,465.27

Source: Las Vegas Visitor Profile 2012

Of our estimated GGR for Florida in 2012 (assuming there were no casinos in Florida aside from limited Class II gaming at Native American casinos), if we assume 56.6 percent left Florida's border (based on our aforementioned in-state vs. out-of-state split) and further apportion our estimated 2.96 million Florida gamblers accordingly, we would yield 1.675 million gamblers who would have gambled outside of Florida. Assuming one-half of these Florida adults

⁵⁸⁷ Las Vegas Visitor Profile 2012 http://www.lvcva.com/includes/content/images/media/docs/2012-Las_Vegas_Visitor_Profile.pdf.

who gambled out of state would have mimicked the non-gaming spending as indicated (based on Las Vegas in 2012), we would yield \$1.227 billion of non-gaming spending – this is spending associated with the \$1 billion of GGR that would have been exported from Florida in the absence of racinos or Class III casinos. The non-gaming spending exceeds the gaming spending in this scenario largely because of the additional cost of airfare, lodging, meals and other attractions that would occur under such a scenario.

From the above sections, we find that the total amount of money that would leave Florida in the absence of Class III and racino gambling opportunities is \$2.227 billion. This total amount is then split in two for the purposes of entry into Tax-PI. Since pari-mutuels and racinos are modeled separately from Native American casinos, the out-of-state spending must be apportioned appropriately among the two sectors. We used the proportion of GGR of each sector to allocate the total spending. This spending is then used to offset the reallocation of consumer dollars that would be freed in the absence of gaming. More specifically, if gambling opportunities were no longer available, then the money that Floridians spent on those activities would become available for other purposes. One of those purposes is out-of-state gambling and related expenditures. The remainder is assumed to be spent on the normal basket of goods and services of a Florida resident.

It is worth noting that the lottery scenario does not receive an allocation of the out-of-state spending. This assumption is based on the nature of participating in lottery gambling in one's own state compared to traveling to popular gambling destination and participating in all the activities available. In short, in the absence of a state lottery program we do not assume that significant numbers of Floridians would travel out-of-state to participate in other lotteries, so in this scenario the consumption reallocation goes entirely to other in-state spending.

We selected five policy variables for the counterfactual simulations: Industry Employment; Industry Sales without Employment, Investment, and Compensation; Wage Bill; Compensation; and Consumption Reallocation.

The Industry Employment variable allows us to remove the total number of direct jobs in the gambling industry (recall that this is a *counterfactual* analysis, so we reduce the amount of employment instead of adding to it); the Industry Sales without Employment, Investment, and Compensation variable is used to account for the higher labor productivity in the gambling industry in comparison to the Amusement, Gambling, and Recreation Industries and Accommodation sectors; the Wage Bill variable is used to adjust the wage & salary differences between the gambling industry and its aggregate sectors; and the Compensation variable is used to adjust the compensation differences between the gambling industry and its aggregate sectors; and the Consumption Reallocation variable is used to capture the spending of Floridians on gambling outside of Florida and to capture the substitution effect of gaming spending within Florida.

The tax revenue of each gaming subsector is taken out directly through the revenue module in Tax-PI. Regulatory costs for pari-mutuels are not explicitly modeled in Tax-PI

because the fees paid by pari-mutuels fund the costs. When we eliminate the direct tax revenue and fees collected from pari-mutuels, we also eliminate the expenditure (e.g., regulatory costs) associated with the revenue.

Note in the following tables that the values for employment, wage, compensation, and productivity adjustments are *negative* because this is what we are removing from the economy; the reallocation amount is positive because it represents the substitution effect of money spent on other goods and services if it were not spent on gambling:

Figure 84: Inputs for Racinos/Pari-Mutuels

Amusement, Gambling, and Recreation Industries - Racinos/Pari-Mutuels		2012
Industry Employment (Industry Sales / Exogenous Production) (number)	Thousands (Jobs)	-4.954
Industry Sales / Exogenous Production without Employment, Investment, and Compensation (amount)	Billions of Fixed (2012) Dollars	-0.188
Consumption Reallocation (amount)	Billions of Fixed (2012) Dollars	0.070

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 85: Inputs for Lottery

Amusement, Gambling, and Recreation Industries - Lottery		2012
Industry Employment (Industry Sales / Exogenous Production) (number)	Thousands (Jobs)	-0.408
Compensation (amount)	Billions of Current Dollars	-0.011
Consumption Reallocation (amount)	Billions of Fixed (2012) Dollars	0.861

Source: Regional Economic Models, Inc., Spectrum Gaming Group

Figure 86: Inputs for Retail Lottery

Retail Trade - Retail Lottery		2012
Industry Employment (Industry Sales / Exogenous Production) (number)	Thousands (Jobs)	-39.900
Industry Sales / Exogenous Production without Employment, Investment, and Compensation (amount)	Billions of Fixed (2012) Dollars	2.489

Source: Regional Economic Models, Inc., Spectrum Gaming Group

Figure 87: Inputs for Native American Casinos

Accommodation - Native American Casinos		2012
Industry Employment (Industry Sales / Exogenous Production) (number)	Thousands (Jobs)	-10.387
Industry Sales / Exogenous Production without Employment, Investment, and Compensation (amount)	Billions of Fixed (2012) Dollars	-1.397
Compensation (amount)	Billions of Current Dollars	-0.102
Consumption Reallocation	Billions of Fixed (2012) Dollars	0.074

Source: Regional Economic Models Inc., Spectrum Gaming Group

Each gambling subsector was modeled as a discrete simulation to determine the economic and fiscal impact of each subsector. The inputs from Figure 84 to Figure 87 provided the following results:

Figure 88: Economic and fiscal impacts of Florida pari-mutuel sector in 2012

Summary	Units	2012
Total Employment ⁵⁸⁸	Thousands (Jobs)	9.488
Population	Thousands	2.621
Gross State Product (GSP)	Billions of Fixed (2012) Dollars	0.683
Personal Income	Billions of Fixed (2012) Dollars	0.397
State Tax Revenues (fiscal year 2013)	Billions of Fixed (2012) Dollars	0.207

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 88 exhibits the total economic and fiscal impacts generated from the existence of the pari-mutuel sector in 2012. The pari-mutuel sector supports a total of 9,488 jobs in Florida. The associated gross state product (“GSP”) is \$683 million and it generated \$397 million in personal income. The tax revenue generated from the direct, indirect, and induced impacts of the pari-mutuel industry in FY 2013 is \$207 million.

Figure 89: Top 12 Florida industries with largest employment impact from pari-mutuels in 2012

Industry category, with NAICS code	Units	2012
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	5.003
Construction (23)	Thousands (Jobs)	0.402
Retail trade (44-45)	Thousands (Jobs)	0.358
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.2
Real estate (531)	Thousands (Jobs)	0.164
Food services and drinking places (722)	Thousands (Jobs)	0.162
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.128
Wholesale trade (42)	Thousands (Jobs)	0.12
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.11
Employment services (5613)	Thousands (Jobs)	0.074
Monetary authorities, credit intermediation, and related activities (521, 522)	Thousands (Jobs)	0.07
Accounting, tax preparation, bookkeeping, and payroll services (5412)	Thousands (Jobs)	0.062

Source: Regional Economic Models Inc.

Figure 89 shows the private non-farm industries that are dependent on the pari-mutuel sector (Amusement, Gambling, and Recreation Industries). Many of these industries, such as Services to Buildings and Dwellings, Business Support Services, and Legal services, are intermediate input suppliers to the gaming industry.

⁵⁸⁸ Total Employment includes private non-farm employment, government employment, and farm employment.

Figure 90: Employment by demand source from pari-mutuels in 2012

Breakdown of Direct, Indirect, and Induced Employment	Units	2012
Private Non-Farm Employment	Thousands (Jobs)	7.922
Intermediate Demand Employment	Thousands (Jobs)	1.659
Local Consumption Demand Employment	Thousands (Jobs)	0.880
Government Demand Employment	Thousands (Jobs)	0.179
Investment Activity Demand Employment	Thousands (Jobs)	0.208
Exports Employment	Thousands (Jobs)	0.042
Exogenous Industry Sales Employment	Thousands (Jobs)	4.953

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good and services from outside Florida.

Figure 90 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct pari-mutuel employment. It can also be interpreted as the direct input we entered into the model. The direct pari-mutuel employment impact is 4,953 jobs in 2012 and the indirect employment (Intermediate Demand Employment) supported by the pari-mutuel sector is 1,659. The induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the pari-mutuel industry is 1,309.⁵⁸⁹ The sum of the direct, indirect, and induced employment is 7,922.

Figure 91: Economic and fiscal impacts of Florida lottery sector in 2012

Summary	Units	2012
Total Employment	Thousands (Jobs)	12.490
Population	Thousands	2.926
Gross State Product (GSP)	Billions of Fixed (2012) Dollars	0.860
Personal Income	Billions of Fixed (2012) Dollars	0.727
State Tax Revenues (fiscal year 2013)	Billions of Fixed (2012) Dollars	1.882
Government Employment	Thousands (Jobs)	9.926

Source: Regional Economic Models Inc., Spectrum Gaming Group.

Figure 91 exhibits the total economic and fiscal impacts generated from the existence of the lottery sector in 2012. The lottery sector (excluding retailers) supports a total of 12,490 jobs in Florida. The associated GSP is \$860 million and it generated \$727 million in personal income. The tax revenue generated from the direct, indirect, and induced impacts of the lottery in FY 2013 is \$1.88 billion. As mentioned previously, the lottery revenue is linked to education

⁵⁸⁹ Where negative induced-job figures are noted throughout this economic analysis (i.e., in the average annual Local Consumption Demand Employment, which is the main component of induced employment), this is primarily because for every dollar Floridians spend on a gambling sector, it means a dollar less they can spend elsewhere. Households have a fixed amount of disposable income and this negative number represents the jobs their spending could have supported if it were not for the relevant gambling sector.

expenditures, thus any changes to the lottery revenue will affect government jobs in Florida. Out of the total 12,490 jobs, 9,926 of them are government employment in 2012.

Figure 92: Top 12 Florida industries with largest employment impact from lottery in 2012

Industry category, with NAICS code	Units	2012
Construction (23)	Thousands (Jobs)	1.464
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	0.401
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.219
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.161
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.133
Wholesale trade (42)	Thousands (Jobs)	0.094
Food services and drinking places (722)	Thousands (Jobs)	0.084
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.078
Employment services (5613)	Thousands (Jobs)	0.063
Real estate (531)	Thousands (Jobs)	0.063
Accounting, tax preparation, bookkeeping, and payroll services (5412)	Thousands (Jobs)	0.061
Legal services (5411)	Thousands (Jobs)	0.059

Source: Regional Economic Models Inc.

Figure 92 shows the private non-farm industries that are dependent on the lottery sector (Amusement, Gambling, and Recreation Industries) and the reallocation of consumer spending. Many of these industries, such as Services to Buildings and Dwellings, Business Support Services, and Legal services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct or indirect jobs.

Figure 93: Employment by demand source from lottery in 2012

Breakdown of Direct, Indirect, and Induced Employment	Units	2012
Private Non-Farm Employment	Thousands (Jobs)	2.564
Intermediate Demand (indirect) Employment	Thousands (Jobs)	2.267
Local Consumption Demand (induced) Employment	Thousands (Jobs)	-1.462
Government Demand (induced) Employment	Thousands (Jobs)	1.154
Investment Activity Demand (induced) Employment	Thousands (Jobs)	0.262
Exports Demand (induced) Employment	Thousands (Jobs)	-0.065
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	0.408

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good services from outside Florida.

Figure 93 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct lottery employment. It can also be interpreted as the direct input we entered into the model. The direct lottery employment impact is 408 jobs in 2012 and the indirect employment (Intermediate Demand Employment) supported by the lottery is 2,267. The induced employment (sum of Local

Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the lottery is minus 111. The sum of the direct, indirect, and induced employment is 2,564.

Figure 94: Economic and fiscal impacts of Florida retail lottery sector in 2012

Summary	Units	2012
Total Employment	Thousands (Jobs)	59.959
Population	Thousands	15.875
Gross State Product (GSP)	Billions of Fixed (2012) Dollars	1.922
Personal Income	Billions of Fixed (2012) Dollars	2.258
State Tax Revenues (fiscal year 2013)	Billions of Fixed (2012) Dollars	0.124

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 94 exhibits the total economic and fiscal impacts generated from the existence of the retail lottery sector in 2012. The retail lottery supports a total of 59,959 jobs in Florida. The associated GSP is \$1.92 billion and it generated \$2.26 billion in personal income. The tax revenue generated from the indirect and induced impacts of the retail lottery industry in FY 2013 is \$124 million.

Figure 95: Top 12 Florida industries with largest employment impact from retail lottery in 2012

Industry category, with NAICS code	Units	2012
Retail trade (44-45)	Thousands (Jobs)	42.361
Construction (23)	Thousands (Jobs)	5.673
Offices of health practitioners (6211-6213)	Thousands (Jobs)	1.000
Food services and drinking places (722)	Thousands (Jobs)	0.892
Real estate (531)	Thousands (Jobs)	0.673
Wholesale trade (42)	Thousands (Jobs)	0.595
Private households (814)	Thousands (Jobs)	0.502
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.442
Hospitals (622)	Thousands (Jobs)	0.347
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.343
Personal care services (8121)	Thousands (Jobs)	0.319
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.307

Source: Regional Economic Models Inc.

Figure 95 shows the private non-farm industries that are dependent on the retail lottery sector (Retail Trade). Some of these, such as Wholesale Trade and Business Support Services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (retail lottery) or indirect jobs.

Figure 96: Employment by demand source from retail lottery in 2012

Breakdown of Direct, Indirect, and Induced Employment	Units	2012
Private Non-Farm Employment	Thousands (Jobs)	58.146
Intermediate Demand (indirect) Employment	Thousands (Jobs)	4.206
Local Consumption Demand (induced) Employment	Thousands (Jobs)	8.085
Government Demand (induced) Employment	Thousands (Jobs)	0.188
Investment Activity Demand (induced) Employment	Thousands (Jobs)	6.381
Exports Demand (induced) Employment	Thousands (Jobs)	-0.612
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	39.900

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good services from outside Florida

Figure 96 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct retail lottery employment. It can also be interpreted as the direct input we entered into the model. The direct retail lottery employment impact is 39,900 jobs in 2012, and the indirect employment (Intermediate Demand Employment) supported by the retail lottery sector is 4,206. The induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the retail lottery industry is 14,042. Income created through both direct and indirect employment is spent on consumer goods, which supports employment in industries providing these goods and services (typically retail and restaurants). These jobs are referred to as Local Consumption Demand Employment in the REMI model. The sum of the direct, indirect, and induced employment is 58,146.

Figure 97: Economic and fiscal impacts of Florida Native American casinos sector in 2012

Summary	Units	2012
Total Employment	Thousands (Jobs)	23.736
Population	Thousands	5.773
Gross State Product (GSP)	Billions of Fixed (2012) Dollars	2.555
Personal Income	Billions of Fixed (2012) Dollars	1.123
State Tax Revenues (fiscal year 2013)	Billions of Fixed (2012) Dollars	0.293

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 97 provides the total economic and fiscal impacts generated from the existence of the Native American casinos in 2012. The Native American casinos support a total of 23,736 jobs in Florida. The associated GSP is \$2.56 billion and it generated \$1.12 billion in personal income. The tax revenue generated from the direct, indirect, and induced impacts of the Native American casinos in FY 2013 is \$293 million.

Figure 98: Top 12 Florida industries with largest employment impact from Native American casinos in 2012

Industry category, with NAICS code	Units	2012
Accommodation (721)	Thousands (Jobs)	10.144
Retail trade (44-45)	Thousands (Jobs)	1.241
Construction (23)	Thousands (Jobs)	1.142
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.952
Food services and drinking places (722)	Thousands (Jobs)	0.905
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.49
Real estate (531)	Thousands (Jobs)	0.414
Wholesale trade (42)	Thousands (Jobs)	0.361
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.338
Employment services (5613)	Thousands (Jobs)	0.242
Private households (814)	Thousands (Jobs)	0.227
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.217

Source: Regional Economic Models Inc.

Figure 98 shows the private non-farm industries that are dependent on the Native American casinos industry (Accommodation). Some of these, such as Services to Buildings and Dwellings and Business Support Services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (Native American casinos) or indirect jobs.

Figure 99: Employment by demand source from Native American casinos in 2012

Breakdown of Direct, Indirect, and Induced Employment	Units	2012
Private Non-Farm Employment	Thousands (Jobs)	20.308
Intermediate Demand (indirect) Employment	Thousands (Jobs)	6.137
Local Consumption Demand (induced) Employment	Thousands (Jobs)	3.573
Government Demand (induced) Employment	Thousands (Jobs)	0.386
Investment Activity Demand (induced) Employment	Thousands (Jobs)	0.668
Exports Demand (induced) Employment	Thousands (Jobs)	-0.842
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	10.387

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good services from outside Florida.

Figure 99 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct Native American casinos employment. It can also be interpreted as the direct input we entered into the model. The direct Native American casinos employment impact is 10,387 jobs in 2012, and the indirect employment (Intermediate Demand Employment) supported by the Native American casinos sector is 6,137. The induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of

the Native American casinos industry is 3,785. The sum of the direct, indirect, and induced employment is 20,308.

1. Floridians' Out-of-State Gaming Spending

Spectrum estimates that casinos along the Gulf Coast of Mississippi and in Alabama, as well as those in Las Vegas and Atlantic City, are generating at least \$411 million of GGR from Florida residents annually. Additionally, there are hundreds of other casinos in the US and a short distance away in the Bahamas and Caribbean islands that Florida residents are visiting (and exporting GGR during such visits). Therefore, we believe it is well within reason that at least \$500 million of GGR annually is being generated at casinos outside of Florida by Florida residents.

Figure 100: Economic and fiscal impacts of Floridians' out-of-state gaming spending in 2012

Summary	Units	2012
Total Employment	Thousands (Jobs)	4.116
Population	Thousands	1.012
Gross State Product (GSP)	Billions of Fixed (2012) Dollars	0.313
Personal Income	Billions of Fixed (2012) Dollars	0.18
State Tax Revenues (fiscal year 2013)	Millions of Fixed (2012) Dollars	15.406

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 100 exhibits the total economic and fiscal impacts that would have been generated if Floridians' out-of-state gaming spending were brought back to Florida in 2012. The total employment impact is 4,116 additional jobs in Florida. The associated GSP is \$313 million and it would have generated \$180 million in personal income. The tax revenue generated from the indirect and induced impacts of the out-of-state gaming spending in FY 2013 is \$15.4 million.

Figure 101: Top 12 Florida industries with largest employment impact from Floridians' out-of-state gaming in 2012

Industry category, with NAICS code	Units	2012
Retail trade (44-45)	Thousands (Jobs)	0.858
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.439
Food services and drinking places (722)	Thousands (Jobs)	0.235
Private households (814)	Thousands (Jobs)	0.221
Construction (23)	Thousands (Jobs)	0.215
Wholesale trade (42)	Thousands (Jobs)	0.167
Personal care services (8121)	Thousands (Jobs)	0.136
Real estate (531)	Thousands (Jobs)	0.135
Hospitals (622)	Thousands (Jobs)	0.105
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.101
Monetary authorities, credit intermediation, and related activities (521, 522)	Thousands (Jobs)	0.085
Securities, commodity contracts, and other financial investments and related activities (523)	Thousands (Jobs)	0.082

Source: Regional Economic Models Inc.

Figure 101 shows the private non-farm industries that would have been impacted if Floridians' out-of-state gaming spending were brought back to Florida. Many of these industries,

such as Retail Trade, Food Services and Drinking Places, and Private Households, are supported by local spending.

Figure 102: Employment by demand source from Floridians' out-of-state gaming spending in 2012

Breakdown of Direct, Indirect, and Induced Employment	Units	2012
Private Non-Farm Employment	Thousands (Jobs)	3.836
Intermediate Demand (indirect) Employment	Thousands (Jobs)	0.693
Local Consumption Demand (induced) Employment	Thousands (Jobs)	3.033
Government Demand (induced) Employment	Thousands (Jobs)	0.031
Investment Activity Demand (induced) Employment	Thousands (Jobs)	0.193
Exports Demand (induced) Employment	Thousands (Jobs)	-0.114
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	0.000

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good services from outside Florida.

Figure 102 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct employment. It can also be interpreted as the direct input we entered into the model. The direct employment impact is 0 in 2012 because we did not use any employment policy variables to model this consumption reallocation of Floridians' out-of-state gaming spending. The indirect employment (Intermediate Demand Employment) is 693. The induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact is 3,143. The sum of the direct, indirect, and induced employment is 3,836.

2. Impact of Hialeah Park Construction (2012)

Construction of Hialeah Park in 2012 was modeled separately from all of the gambling subsector economic impact assessments. The total cost of construction for Hialeah Park is \$63.36 million, with an average annual construction employment of 210. The construction duration was estimated to be 24 months starting in summer of 2011.

Figure 103: Economic and fiscal impacts of Hialeah Park construction in 2012

Summary	Units	2012
Total Employment	Jobs	364
Population	Individuals	125
Gross State Product (GSP)	Millions of Fixed (2012) Dollars	29.602
Personal Income	Millions of Fixed (2012) Dollars	18.311
State Tax Revenues (fiscal year 2013)	Millions of Fixed (2012) Dollars	0.9219

Source: Regional Economic Models Inc., Spectrum Gaming Group

The construction activity in 2012 generates a total 364 jobs, \$29.6 million in GSP, and \$18.3 million in personal income. It also induces \$0.92 million in state tax revenue for FY 2013.

Assessment of Economic, Fiscal Impacts over Time

An assessment of the changes in those impacts over time until the present day, historically, and projections for the future.

For this section, we employed the same policy variables as in Chapter III(B) above and ran a counterfactual analysis for years 2012 through 2060 to observe the impacts of the *existing* gambling industry over time. In addition, we established two alternative national forecasts: one with 5 percent slower economic growth and the other with 5 percent stronger economic growth, relative to the state benchmark baseline in the model. The new national forecasts generated new regional forecasts for Florida. We then ran the same set of inputs against the three regional forecasts to quantify the impacts of the gambling industry under different economic trajectories.

REMI and Spectrum assume that, over time, the employment in the overall existing gambling industry will expand at half the growth rate of its aggregate sectors in the REMI model. Given the regulations and restrictions imposed on the gambling industry, it is difficult to justify that the industry can expand at the same rate as a typical entertainment/recreation, retail trade, or accommodation industry. On the other hand, assuming no growth in the next 50 years is an excessively conservative assumption. We believe it is reasonable to choose a growth rate in between the two extremes. We assume wages and labor productivity will both grow at the same rate as the respective aggregate sector.

The following are tables showing the forecasted employment, output, wage and salary/compensation, and consumption reallocation for each of the gambling subsectors.

Figure 104: Racinos, pari-mutuels forecast

Racinos/Pari-mutuels	Units	2012	2015	2020	2025	2030	
Employment	Thousands (Jobs)	4.954	5.086	5.273	5.402	5.500	
Output	Billions of Fixed (2012) Dollars	0.528	0.548	0.580	0.614	0.646	
Wage & Salary Disbursements	Billions of Current Dollars	0.149	0.173	0.219	0.281	0.349	
Consumption Reallocation	Billions of Fixed (2012) Dollars	0.070	0.099	0.142	0.187	0.233	
Racinos/Pari-mutuels	Units	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	5.574	5.602	5.601	5.571	5.525	5.464
Output	Billions of Fixed (2012) Dollars	0.676	0.702	0.724	0.744	0.761	0.775
Wage & Salary Disbursements	Billions of Current Dollars	0.427	0.512	0.607	0.709	0.824	0.950
Consumption Reallocation	Billions of Fixed (2012) Dollars	0.280	0.322	0.362	0.398	0.433	0.465

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 105: Lottery forecast

Lottery	Units	2012	2015	2020	2025	2030	
Employment	Thousands (Jobs)	0.408	0.419	0.434	0.445	0.453	
Net Revenue	Billions of Current Dollars	0.861	1.755	1.876	2.332	4.199	
Compensation	Billions of Current Dollars	0.025	0.029	0.038	0.048	0.060	
Consumption Reallocation	Billions of Fixed (2012) Dollars	4.361	4.529	4.797	5.076	5.339	
Lottery	Units	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	0.459	0.461	0.461	0.459	0.455	0.450
Net Revenue	Billions of Fixed (2012) Dollars	5.118	6.343	7.772	9.187	10.665	6.058
Compensation	Billions of Current Dollars	0.074	0.088	0.105	0.122	0.142	0.164
Consumption Reallocation	Billions of Fixed (2012) Dollars	5.589	5.801	5.988	6.148	6.288	6.409

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 106: Retail Lottery forecast

Retail Lottery	Units	2012	2015	2020	2025	2030	
Employment	Thousands (Jobs)	39.900	40.681	41.445	41.172	40.774	
Output	Billions of Fixed (2012) Dollars	0.248	0.271	0.310	0.350	0.393	
Retail Lottery	Units	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	40.262	39.375	38.255	36.983	35.659	34.242
Output	Billions of Fixed (2012) Dollars	0.441	0.489	0.539	0.591	0.646	0.702

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 107: Casino Hotels forecast (including Native American casinos)

Native American Casinos	Units	2012	2015	2020	2025	2030	
Employment	Thousands (Jobs)	10.387	10.590	10.710	10.794	10.910	
Output	Billions of Fixed (2012) Dollars	2.200	2.350	2.530	2.833	3.133	
Compensation	Billions of Current Dollars	0.349	0.400	0.468	0.602	0.736	
Consumption Reallocation	Billions of Fixed (2012) Dollars	0.074	0.191	0.373	0.578	0.816	
Native American Casinos	Units	2035	2040	2045	2050	2055	2060
Employment	Thousands (Jobs)	11.055	11.134	11.187	11.223	11.260	11.304
Output	Billions of Fixed (2012) Dollars	3.474	3.831	4.214	4.628	5.080	5.576
Compensation	Billions of Current Dollars	0.899	1.081	1.292	1.534	1.821	2.159
Consumption Reallocation	Billions of Fixed (2012) Dollars	1.089	1.374	1.682	2.015	2.381	2.784

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 108: Floridians' out-of-state gaming spending forecast

FL Resident Out-of-State Gaming Spending	Units	2012	2015	2020	2025	2030	
Consumption Reallocation	Billions of Fixed (2012) Dollars	0.500	0.500	0.500	0.500	0.500	
FL Resident Out-of-State Gaming Spending	Units	2035	2040	2045	2050	2055	2060
Consumption Reallocation	Billions of Fixed (2012) Dollars	0.500	0.500	0.500	0.500	0.500	0.500

Source: Regional Economic Models Inc., Spectrum Gaming Group

1. Results – Slow Economic Growth (2012-2060)

Figure 109: Economic and fiscal impacts of pari-mutuel sector, 2012-2060, slow growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	9.804
Average Annual Population	Thousands	13.132
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	47.939
Cumulative Personal Income	Billions of Fixed (2012) Dollars	49.26
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.587

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the pari-mutuel sector is projected to support an annual average of 9,804 jobs in Florida under slow economic growth assumptions. The cumulative GSP is \$47.9 billion and personal income is \$49.3 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the pari-mutuel industry between FY 2013 and FY 2060 are \$587 million.

Figure 110: Top 12 Florida industries with largest average employment impact from pari-mutuel, 2012-2060, slow growth

Industry category, with NAICS code	Units	2012-2060
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	3.009
Construction (23)	Thousands (Jobs)	0.596
Retail trade (44-45)	Thousands (Jobs)	0.299
Nursing and residential care facilities (623)	Thousands (Jobs)	0.197
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.167
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.150
Food services and drinking places (722)	Thousands (Jobs)	0.137
Hospitals (622)	Thousands (Jobs)	0.126
Wholesale trade (42)	Thousands (Jobs)	0.124
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.096
Real estate (531)	Thousands (Jobs)	0.093
Home health care services (6216)	Thousands (Jobs)	0.085

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 110 shows the private non-farm industries with the largest average annual employment impact. Aside from the Amusement, Gambling, and Recreation Industries, which is the direct impact for this subsector, the rest are the top industries that are reliant on the pari-mutuel industry in Florida. Many of these industries, such as Business Support Services and Services to Buildings and Dwellings are intermediate input suppliers to the pari-mutuel industry.

Figure 111: Average annual employment by demand source from pari-mutuel, 2012-2060, slow growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	5.907
Intermediate Demand Employment	Thousands (Jobs)	1.757
Local Consumption Demand Employment	Thousands (Jobs)	0.483
Government Demand Employment	Thousands (Jobs)	0.398
Investment Activity Demand Employment	Thousands (Jobs)	0.289
Exports Employment	Thousands (Jobs)	-2.469
Exogenous Industry Sales Employment	Thousands (Jobs)	5.449

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 111 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct pari-mutuel employment. It can also be interpreted as the direct input we entered into the model. The average annual direct pari-mutuel employment impact is 5,449 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the pari-mutuel sector is 1,757. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the pari-mutuel industry is minus 1,298. The sum of the average annual direct, indirect, and induced employment is 5,907.

Figure 112: Economic and fiscal impacts of lottery industry, 2012-2060, slow growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	28.205
Average Annual Population	Thousands	39.044
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	117.801
Cumulative Personal Income	Billions of Fixed (2012) Dollars	156.939
Average Annual State Tax Revenues (fiscal year)	Billions of Fixed (2012) Dollars	3.452
Average Annual Government Employment	Thousands (Jobs)	23.430

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the lottery sector (excluding retailers) is projected to support an annual average of 28,205 jobs in Florida under slow economic growth assumptions. The cumulative GSP is \$117.8 billion and personal income is \$156.9 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the lottery industry between FY 2013 and FY 2060 are \$3.45 billion. As mentioned previously, the lottery revenues are linked to education expenditures, thus any changes to the lottery revenues will affect government jobs in Florida. Out of the average annual 28,205 jobs between 2012 and 2060, 23,430 of them are government employment.

Figure 113: Top 12 Florida industries with largest average employment impact from lottery, 2012-2060, slow growth

Industry category, with NAICS code	Units	2012-2060
Construction (23)	Thousands (Jobs)	2.865
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	0.561
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.478
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.390
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.338
Wholesale trade (42)	Thousands (Jobs)	0.336
Food services and drinking places (722)	Thousands (Jobs)	0.294
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.259
Real estate (531)	Thousands (Jobs)	0.182
Employment services (5613)	Thousands (Jobs)	0.173
Accounting, tax preparation, bookkeeping, and payroll services (5412)	Thousands (Jobs)	0.145
Legal services (5411)	Thousands (Jobs)	0.134

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 113 shows the private non-farm industries with largest average annual employment impact. Aside from the Amusement, Gambling, and Recreation Industries, which is the direct impact for this subsector, the rest are the top industries that are reliant on the lottery industry in Florida. Many of these industries, such as Services to Buildings and Dwellings, Business Support Services, and Management Consulting, are intermediate input suppliers to the lottery industry.

Figure 114: Average annual employment by demand source from lottery, 2012-2060, slow growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	4.775
Intermediate Demand Employment	Thousands (Jobs)	5.295
Local Consumption Demand Employment	Thousands (Jobs)	-2.053
Government Demand Employment	Thousands (Jobs)	2.425
Investment Activity Demand Employment	Thousands (Jobs)	0.479
Exports Employment	Thousands (Jobs)	-1.820
Exogenous Industry Sales Employment	Thousands (Jobs)	0.449

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 114 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct lottery employment. It can also be interpreted as the direct input we entered into the model. The average annual direct lottery employment impact is 449 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the lottery sector is 5,295. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the lottery industry is minus 969. The sum of the average annual direct, indirect, and induced employment is 4,775.

Figure 115: Economic and fiscal impacts of retail lottery industry, 2012-2060, slow growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	78.073
Average Annual Population	Thousands	128.361
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	368.241
Cumulative Personal Income	Billions of Fixed (2012) Dollars	358.951
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.581

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the retail lottery industry is projected to support an annual average of 78,073 jobs in Florida under slow economic growth assumptions. The cumulative GSP is \$368.2 billion and personal income is personal income is \$359 billion. The average annual tax revenues generated from the indirect and induced impacts of the retail lottery industry between FY 2013 and FY 2060 are \$581 million.

Figure 116: Top 12 Florida industries with largest average employment impact from retail lottery, 2012-2060, slow growth

Industry category, with NAICS code	Units	2012-2060
Retail trade (44-45)	Thousands (Jobs)	42.780
Construction (23)	Thousands (Jobs)	9.373
Food services and drinking places (722)	Thousands (Jobs)	2.283
Computer systems design and related services (5415)	Thousands (Jobs)	2.255
Offices of health practitioners (6211-6213)	Thousands (Jobs)	1.677
Architectural, engineering, and related services (5413)	Thousands (Jobs)	1.540
Nursing and residential care facilities (623)	Thousands (Jobs)	1.453
Hospitals (622)	Thousands (Jobs)	1.204
Educational services (61)	Thousands (Jobs)	1.186
Wholesale trade (42)	Thousands (Jobs)	1.179
Home health care services (6216)	Thousands (Jobs)	1.026
Real estate (531)	Thousands (Jobs)	1.011

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 116 shows the private non-farm industries with largest average annual employment impact. Aside from Retail Trade, which is the direct impact for retail lottery, the rest are the top industries that are reliant on the retail lottery industry in Florida. Some of these, such as Wholesale Trade and Computer Systems Design Services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (retail lottery) or indirect jobs.

Figure 117: Average annual employment by demand source from retail lottery, 2012-2060, slow growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	78.164
Intermediate Demand Employment	Thousands (Jobs)	10.148
Local Consumption Demand Employment	Thousands (Jobs)	16.625
Government Demand Employment	Thousands (Jobs)	0.032
Investment Activity Demand Employment	Thousands (Jobs)	17.612
Exports Employment	Thousands (Jobs)	-5.351
Exogenous Industry Sales Employment	Thousands (Jobs)	39.099

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 117 provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct retail lottery employment. It can also be interpreted as the direct input we entered into the model. The average annual direct retail lottery employment impact is 39,099 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the retail lottery sector is 10,148. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the retail lottery industry is 27,674. The sum of the average annual direct, indirect, and induced employment is 78,164.

Figure 118: Economic and fiscal impacts of Native American casinos industry, 2012-2060, slow growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	21.123
Average Annual Population	Thousands	32.394
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	185.557
Cumulative Personal Income	Billions of Fixed (2012) Dollars	112.21
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.401

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the Native American casinos industry is projected to support an annual average of 21,123 jobs in Florida under slow economic growth assumptions. The cumulative GSP is \$185.6 billion and personal income is \$112.2 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the Native American casinos industry between FY 2013 and FY 2060 are \$401 million.

Figure 119: Top 12 Florida industries with largest average employment impact from Native American casinos, 2012-2060, slow growth

Industry category, with NAICS code	Units	2012-2060
Accommodation (721)	Thousands (Jobs)	11.463
Food services and drinking places (722)	Thousands (Jobs)	1.028
Construction (23)	Thousands (Jobs)	0.974
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.869
Retail trade (44-45)	Thousands (Jobs)	0.510
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.333
Nursing and residential care facilities (623)	Thousands (Jobs)	0.296
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.262
Employment services (5613)	Thousands (Jobs)	0.260
Hospitals (622)	Thousands (Jobs)	0.238
Wholesale trade (42)	Thousands (Jobs)	0.220
Real estate (531)	Thousands (Jobs)	0.197

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 119 shows the private non-farm industries with largest average annual employment impact. Aside from Accommodation, which is the direct impact for this analysis, the rest are the top industries that are reliant on the Native American casinos industry in Florida. Some of these, such as Services to Buildings and Dwellings and Business Support Services, are intermediate input suppliers to the Native American casinos industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (Native American casinos) or indirect jobs.

Figure 120: Average annual employment by demand source from Native American casinos, 2012-2060, slow growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	18.008
Intermediate Demand Employment	Thousands (Jobs)	6.246
Local Consumption Demand Employment	Thousands (Jobs)	1.840
Government Demand Employment	Thousands (Jobs)	0.306
Investment Activity Demand Employment	Thousands (Jobs)	0.848
Exports Employment	Thousands (Jobs)	-2.225
Exogenous Industry Sales Employment	Thousands (Jobs)	10.993

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 120 provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct Native American casinos employment. It can also be interpreted as the direct input we entered into the model. The average annual direct Native American casinos employment impact is 10,993 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the gaming sector is 6,246. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the Native American casinos industry is 769. The sum of the average annual direct, indirect, and induced employment is 18,008.

Figure 121: Economic and fiscal impacts of Floridians' out-of-state gaming spending, 2012-2060, slow growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	2.889
Average Annual Population	Thousands	4.946
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	15.599
Cumulative Personal Income	Billions of Fixed (2012) Dollars	14.357
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Millions of Fixed (2012) Dollars	28.583

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, if out-of-state gambling dollars by Florida residents were to instead remain in Florida, this spending would support an annual average of 2,889 jobs in Florida under slow economic growth assumptions. The cumulative GSP is \$15.6 billion and personal income is \$14.4 billion. The average annual tax revenues generated from the indirect and induced impacts of the out-of-state gaming spending between FY 2013 and FY 2060 are \$28.6 million.

Figure 122: Top 12 Florida industries with largest average employment impact from Floridians' out-of-state gaming spending, 2012-2060, slow growth

Industry category, with NAICS code	Units	2012-2060
Retail trade (44-45)	Thousands (Jobs)	0.511
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.398
Food services and drinking places (722)	Thousands (Jobs)	0.174
Construction (23)	Thousands (Jobs)	0.157
Private households (814)	Thousands (Jobs)	0.128
Nursing and residential care facilities (623)	Thousands (Jobs)	0.103
Wholesale trade (42)	Thousands (Jobs)	0.103
Hospitals (622)	Thousands (Jobs)	0.096
Real estate (531)	Thousands (Jobs)	0.087
Educational services (61)	Thousands (Jobs)	0.072
Home health care services (6216)	Thousands (Jobs)	0.069
Personal care services (8121)	Thousands (Jobs)	0.068

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 122 shows the private non-farm industries that would have been impacted if Floridians' out-of-state gaming spending were brought back to Florida. Many of these industries, such as Retail Trade, Food Services and Drinking Places, and Private Households, are commonly supported by local spending.

Figure 123: Average annual employment by demand source from Floridians' out-of-state gaming spending, 2012-2060, slow growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	2.822
Intermediate Demand Employment	Thousands (Jobs)	0.488
Local Consumption Demand Employment	Thousands (Jobs)	2.352
Government Demand Employment	Thousands (Jobs)	0.010
Investment Activity Demand Employment	Thousands (Jobs)	0.251
Exports Employment	Thousands (Jobs)	-0.280
Exogenous Industry Sales Employment	Thousands (Jobs)	0.000

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 123 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents direct employment. It can also be interpreted as the direct input we entered into the model. The average annual direct employment impact is 0 jobs because we did not use any employment policy variables to model this consumption reallocation of Floridians' out-of-state gaming spending. The average annual indirect employment (Intermediate Demand Employment) is 488. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact is 2,334. The sum of the average annual direct, indirect, and induced employment is 2,822.

2. Results – Normal Economic Growth (2012-2060)

Figure 124: Economic and fiscal impacts of pari-mutuel sector, 2012-2060, normal growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	9.001
Average Annual Population	Thousands	11.237
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	44.132
Cumulative Personal Income	Billions of Fixed (2012) Dollars	45.554
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.581

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the pari-mutuel sector is projected to support an annual average of 9,001 jobs⁵⁹⁰ in Florida under normal economic growth assumptions. The cumulative GSP is \$44.1 billion and personal income is \$45.6 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the pari-mutuel industry between FY 2013 and FY 2060 are \$581 million.

⁵⁹⁰ The job numbers in REMI are not cumulative. If the job impact is 5,000 in 2012 and 4,000 in 2013, we cannot conclude that the total job impact in 2012 and 2013 is 9,000 because the 4,000 jobs in 2013 can be the same jobs from 2012. Therefore, we compute an annual average when we evaluate long-term job impacts. In the above example, the average annual employment in 2012 and 2013 is 4,500 jobs.

Figure 125: Top 12 Florida industries with largest average employment impact from pari-mutuel, 2012-2060, normal growth

Industry category, with NAICS code	Units	2012-2060
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	2.577
Construction (23)	Thousands (Jobs)	0.576
Retail trade (44-45)	Thousands (Jobs)	0.258
Nursing and residential care facilities (623)	Thousands (Jobs)	0.177
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.149
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.134
Wholesale trade (42)	Thousands (Jobs)	0.111
Hospitals (622)	Thousands (Jobs)	0.110
Food services and drinking places (722)	Thousands (Jobs)	0.106
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.086
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.075
Home health care services (6216)	Thousands (Jobs)	0.072

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 125 shows the private non-farm industries with largest average annual employment impact. Aside from the Amusement, Gambling, and Recreation Industries, which is the direct impact for this subsector, the rest are the top industries that are reliant on the pari-mutuel industry in Florida. Many of these industries, such as Business Support Services and Services to Buildings and Dwellings are intermediate input suppliers to the pari-mutuel industry.

Figure 126: Average annual employment by demand source from pari-mutuel, 2012-2060, normal growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	5.116
Intermediate Demand Employment	Thousands (Jobs)	1.607
Local Consumption Demand Employment	Thousands (Jobs)	0.283
Government Demand Employment	Thousands (Jobs)	0.405
Investment Activity Demand Employment	Thousands (Jobs)	0.250
Exports Employment	Thousands (Jobs)	-2.876
Exogenous Industry Sales Employment	Thousands (Jobs)	5.449

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 126 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct pari-mutuel employment. It can also be interpreted as the direct input we entered into the model. The average annual direct pari-mutuel employment impact is 5,449 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the pari-mutuel sector is 1,607. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the pari-mutuel industry is minus 1,939. The sum of the average annual direct, indirect, and induced employment is 5,116.

Figure 127: Economic and fiscal impacts of lottery industry, 2012-2060, normal growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	28.690
Average Annual Population	Thousands	38.370
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	119.307
Cumulative Personal Income	Billions of Fixed (2012) Dollars	159.575
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	3.561
Average Annual Government Employment	Thousands (Jobs)	24.058

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the lottery sector (excluding retailers) is projected to support an annual average of 28,690 jobs in Florida under normal economic growth assumptions. The cumulative GSP is \$119.3 billion and personal income is \$159.6 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the lottery industry between FY 2013 and FY 2060 are \$3.56 billion. As mentioned previously, the lottery revenues are linked to education expenditures, thus any changes to the lottery revenues will affect government jobs in Florida. Therefore, the lottery sector also supports an average annual of 23,501 government jobs between 2012 and 2060. Out of the average annual 28,690 jobs between 2012 and 2060, 24,058 of them are government employment.

Figure 128: Top 12 Florida industries with largest average employment impact from lottery, 2012-2060, normal growth

Industry category, with NAICS code	Units	2012-2060
Construction (23)	Thousands (Jobs)	2.988
Nursing and residential care facilities (623)	Thousands (Jobs)	0.554
Food services and drinking places (722)	Thousands (Jobs)	0.461
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	0.368
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.342
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.328
Individual and family services; Community and vocational rehabilitation services (6241-6243)	Thousands (Jobs)	0.291
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.253
Wholesale trade (42)	Thousands (Jobs)	0.177
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.173
Hospitals (622)	Thousands (Jobs)	0.140
Waste management and remediation services (562)	Thousands (Jobs)	0.136

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 128 shows the private non-farm industries with largest average annual employment impact. Aside from the Amusement, Gambling, and Recreation Industries, which is the direct impact for this subsector, the rest are the top industries that are reliant on the lottery industry in Florida. Many of these industries, such as Services to Buildings and Dwellings, Business Support Services, and Management Consulting, are intermediate input suppliers to the lottery industry.

Figure 129: Average annual employment by demand source from lottery, 2012-2060, normal growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	4.631
Intermediate Demand (indirect) Employment	Thousands (Jobs)	5.288
Local Consumption Demand (induced) Employment	Thousands (Jobs)	-2.227
Government Demand (induced) Employment	Thousands (Jobs)	2.535
Investment Activity Demand (induced) Employment	Thousands (Jobs)	0.489
Exports Demand (induced) Employment	Thousands (Jobs)	-1.903
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	0.449

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 129 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct lottery employment. It can also be interpreted as the direct input we entered into the model. The average annual direct lottery employment impact is 449 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the lottery sector is 5,288. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the lottery industry is minus 1,106. The sum of the average annual direct, indirect, and induced employment is 4,631.

Figure 130: Economic and fiscal impacts of retail lottery industry, 2012-2060, normal growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	76.616
Average Annual Population	Thousands	122.954
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	358.902
Cumulative Personal Income	Billions of Fixed (2012) Dollars	354.081
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.590

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the retail lottery industry is projected to support an annual average of 76,616 jobs in Florida under normal economic growth assumptions. The cumulative GSP is \$358.9 billion and personal income is \$354.1 billion. The average annual tax revenues generated from the indirect and induced impacts of the retail lottery industry between FY 2013 and FY 2060 are \$590 million.

Figure 131: Top 12 Florida industries with largest average annual employment impact from retail lottery, 2012-2060, normal growth

Industry category, with NAICS code	Units	2012-2060
Retail trade (44-45)	Thousands (Jobs)	42.152
Construction (23)	Thousands (Jobs)	9.292
Food services and drinking places (722)	Thousands (Jobs)	2.196
Computer systems design and related services (5415)	Thousands (Jobs)	2.155
Offices of health practitioners (6211-6213)	Thousands (Jobs)	1.654
Architectural, engineering, and related services (5413)	Thousands (Jobs)	1.487
Nursing and residential care facilities (623)	Thousands (Jobs)	1.407
Hospitals (622)	Thousands (Jobs)	1.168
Wholesale trade (42)	Thousands (Jobs)	1.145
Educational services (61)	Thousands (Jobs)	1.142
Home health care services (6216)	Thousands (Jobs)	0.986
Real estate (531)	Thousands (Jobs)	0.938

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 131 shows the private non-farm industries with largest average annual employment impact. Aside from Retail Trade, which is the direct impact for retail lottery, the rest are the top industries that are reliant on the retail lottery industry in Florida. Some of these, such as Wholesale Trade and Computer Systems Design Services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (retail lottery) or indirect jobs.

Figure 132: Average annual employment by demand source from retail lottery, 2012-2060, normal growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	76.548
Intermediate Demand (indirect) Employment	Thousands (Jobs)	9.775
Local Consumption Demand (induced) Employment	Thousands (Jobs)	16.159
Government Demand (induced) Employment	Thousands (Jobs)	0.051
Investment Activity Demand (induced) Employment	Thousands (Jobs)	17.146
Exports Demand (induced) Employment	Thousands (Jobs)	-5.682
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	39.099

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 132 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct retail lottery employment. It can also be interpreted as the direct input we entered into the model. The average annual direct retail lottery employment impact is 39,099 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the retail lottery sector is 9,775. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the retail lottery industry is 27,674. The sum of the average annual direct, indirect, and induced employment is 76,548.

Figure 133: Economic and fiscal impacts of Native American casinos industry, 2012-2060, normal growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	19.201
Average Annual Population	Thousands	28.555
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	170.630
Cumulative Personal Income	Billions of Fixed (2012) Dollars	103.717
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.374

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the Native American casinos industry is projected to support an annual average of 19,201 jobs in Florida under normal economic growth assumptions. The cumulative GSP is \$170.6 billion and personal income is \$103.7 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the Native American casinos industry between FY 2013 and FY 2060 are \$374 million.

Figure 134: Top 12 Florida industries with largest average employment impact from Native American casinos, 2012-2060, normal growth

Industry category, with NAICS code	Units	2012-2060
Accommodation (721)	Thousands (Jobs)	10.648
Construction (23)	Thousands (Jobs)	0.912
Food services and drinking places (722)	Thousands (Jobs)	0.904
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.787
Retail trade (44-45)	Thousands (Jobs)	0.415
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.304
Nursing and residential care facilities (623)	Thousands (Jobs)	0.259
Employment services (5613)	Thousands (Jobs)	0.236
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.232
Hospitals (622)	Thousands (Jobs)	0.208
Wholesale trade (42)	Thousands (Jobs)	0.191
Advertising and related services (5418)	Thousands (Jobs)	0.162

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 134 shows the private non-farm industries with largest average annual employment impact. Aside from Accommodation, which is the direct impact for this analysis, the rest are the top industries that are reliant on the Native American casinos industry in Florida. Some of these, such as Services to Buildings and Dwellings and Business Support Services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (Native American casinos) or indirect jobs.

Figure 135: Average annual employment by demand source from Native American casinos, 2012-2060, normal growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	16.179
Intermediate Demand (indirect) Employment	Thousands (Jobs)	5.660
Local Consumption Demand (induced) Employment	Thousands (Jobs)	1.397
Government Demand (induced) Employment	Thousands (Jobs)	0.303
Investment Activity Demand (induced) Employment	Thousands (Jobs)	0.757
Exports Demand (induced) Employment	Thousands (Jobs)	-2.930
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	10.993

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 135 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct Native American casinos employment. It can also be interpreted as the direct input we entered into the model. The average annual direct Native American casinos employment impact is 10,993 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the gaming sector is 5,660. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the Native American casinos industry is minus 473. The sum of the average annual direct, indirect, and induced employment is 16,179.

Figure 136: Economic and fiscal impacts of Floridians' out-of-state gaming spending, 2012-2060, normal growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	2.764
Average Annual Population	Thousands	4.563
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	14.813
Cumulative Personal Income	Billions of Fixed (2012) Dollars	13.792
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Millions of Fixed (2012) Dollars	27.060

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, if out-of-state gambling dollars by Florida residents were to instead remain in Florida, this spending would support an annual average of 2,764 jobs in Florida under normal economic growth assumptions. The cumulative GSP is \$14.8 billion and personal income is \$13.8 billion. The average annual tax revenues generated from the indirect and induced impacts of the out-of-state gaming spending between FY 2013 and FY 2060 are \$27.1 million.

Figure 137: Top 12 Florida industries with largest average employment impact from Floridians' out-of-state gaming spending, 2012-2060, normal growth

Industry category, with NAICS code	Units	2012-2060
Retail trade (44-45)	Thousands (Jobs)	0.488
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.390
Food services and drinking places (722)	Thousands (Jobs)	0.165
Construction (23)	Thousands (Jobs)	0.152
Private households (814)	Thousands (Jobs)	0.124
Wholesale trade (42)	Thousands (Jobs)	0.099
Nursing and residential care facilities (623)	Thousands (Jobs)	0.098
Hospitals (622)	Thousands (Jobs)	0.091
Real estate (531)	Thousands (Jobs)	0.080
Educational services (61)	Thousands (Jobs)	0.068
Personal care services (8121)	Thousands (Jobs)	0.066
Home health care services (6216)	Thousands (Jobs)	0.065

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 137 shows the private non-farm industries that would have been impacted if Floridians' out-of-state gaming spending were brought back to Florida. Many of these industries, such as Retail Trade, Food Services and Drinking Places, and Private Households, are commonly supported by local spending.

Figure 138: Average annual employment by demand source from Floridians' out-of-state gaming spending, 2012-2060, normal growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	2.695
Intermediate Demand (indirect) Employment	Thousands (Jobs)	0.455
Local Consumption Demand (induced) Employment	Thousands (Jobs)	2.261
Government Demand (induced) Employment	Thousands (Jobs)	0.011
Investment Activity Demand (induced) Employment	Thousands (Jobs)	0.238
Exports Demand (induced) Employment	Thousands (Jobs)	-0.271
Exogenous Industry Sales (direct) Employment	Thousands (Jobs)	0.000

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 138 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents direct employment. It can also be interpreted as the direct input we entered into the model. The average annual direct employment impact is 0 jobs because we did not use any employment policy variables to model this consumption reallocation of Floridians' out-of-state gambling spending. The average annual indirect employment (Intermediate Demand Employment) is 455. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact is 2,239. The sum of the average annual direct, indirect, and induced employment is 2,695.

3. Results – Strong Economic Growth (2012-2060)

Figure 139: Economic and fiscal impacts of pari-mutuel sector, 2012-2060, strong growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	8.294
Average Annual Population	Thousands	9.678
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	40.817
Cumulative Personal Income	Billions of Fixed (2012) Dollars	42.215
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Millions of Fixed (2012) Dollars	0.575

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the pari-mutuel sector is projected to support an annual average of 8,294 jobs in Florida under strong economic growth assumptions. The cumulative GSP is \$40.8 billion and personal income is \$42.2 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the pari-mutuel industry between FY 2013 and FY 2060 are \$575 million.

Figure 140: Top 12 Florida industries with largest average employment impact from pari-mutuel, 2012-2060, strong growth

Industry category, with NAICS code	Units	2012-2060
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	2.191
Construction (23)	Thousands (Jobs)	0.558
Retail trade (44-45)	Thousands (Jobs)	0.223
Nursing and residential care facilities (623)	Thousands (Jobs)	0.159
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.131
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.121
Wholesale trade (42)	Thousands (Jobs)	0.100
Hospitals (622)	Thousands (Jobs)	0.097
Food services and drinking places (722)	Thousands (Jobs)	0.080
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.078
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.070
Home health care services (6216)	Thousands (Jobs)	0.061

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 140 shows the private non-farm industries with largest average annual employment impact. Aside from the Amusement, Gambling, and Recreation Industries, which is the direct impact for this subsector, the rest are the top industries that are reliant on the pari-mutuel industry in Florida. Many of these industries, such as Business Support Services and Services to Buildings and Dwellings are intermediate input suppliers to the pari-mutuel industry.

Figure 141: Average annual employment by demand source from pari-mutuel, 2012-2060, strong growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	4.420
Intermediate Demand Employment	Thousands (Jobs)	1.478
Local Consumption Demand Employment	Thousands (Jobs)	0.111
Government Demand Employment	Thousands (Jobs)	0.410
Investment Activity Demand Employment	Thousands (Jobs)	0.215
Exports Employment	Thousands (Jobs)	-3.243
Exogenous Industry Sales Employment	Thousands (Jobs)	5.449

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 141 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct pari-mutuel employment. It can also be interpreted as the direct input we entered into the model. The average annual direct pari-mutuel employment impact is 5,449 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the pari-mutuel sector is 1,478. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the pari-mutuel industry is minus 2,506. The sum of the average annual direct, indirect, and induced employment is 4,420.

Figure 142: Economic and fiscal impacts of lottery industry, 2012-2060, strong growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	29.025
Average Annual Population	Thousands	37.633
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	120.089
Cumulative Personal Income	Billions of Fixed (2012) Dollars	160.987
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	3.645
Average Annual Government Employment	Thousands (Jobs)	24.559

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the lottery sector (excluding retailers) is projected to support an annual average of 29,025 jobs in Florida under strong economic growth assumptions. The cumulative GSP is \$120.1 billion and personal income is \$161 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the lottery industry between FY 2013 and FY 2060 are \$3.65 billion. As mentioned previously, the lottery revenues is linked to education expenditures, thus any changes to the lottery revenues will affect government jobs in Florida. Out of the average annual 29,025 jobs between 2012 and 2060, 24,559 of them are government employment.

Figure 143: Top 12 Florida industries with largest average employment impact from lottery, 2012-2060, strong growth

Industry category, with NAICS code	Units	2012-2060
Construction (23)	Thousands (Jobs)	3.088
Nursing and residential care facilities (623)	Thousands (Jobs)	0.544
Food services and drinking places (722)	Thousands (Jobs)	0.444
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	0.348
Architectural, engineering, and related services (5413)	Thousands (Jobs)	0.344
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.318
Individual and family services; Community and vocational rehabilitation services (6241-6243)	Thousands (Jobs)	0.287
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.245
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.174
Wholesale trade (42)	Thousands (Jobs)	0.170
Waste management and remediation services (562)	Thousands (Jobs)	0.138
Hospitals (622)	Thousands (Jobs)	0.136

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 143 shows the private non-farm industries with largest average annual employment impact. Aside from the Amusement, Gambling, and Recreation Industries, which is the direct impact for this subsector, the rest are the top industries that are reliant on the lottery industry in Florida. Many of these industries, such as Services to Buildings and Dwellings, Business Support Services, and Management Consulting, are intermediate input suppliers to the lottery industry.

Figure 144: Average annual employment by demand source from lottery, 2012-2060, strong growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	4.466
Intermediate Demand Employment	Thousands (Jobs)	5.256
Local Consumption Demand Employment	Thousands (Jobs)	-2.384
Government Demand Employment	Thousands (Jobs)	2.625
Investment Activity Demand Employment	Thousands (Jobs)	0.496
Exports Employment	Thousands (Jobs)	-1.976
Exogenous Industry Sales Employment	Thousands (Jobs)	0.449

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 144 provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct lottery employment. It can also be interpreted as the direct input we entered into the model. The average annual direct lottery employment impact is 449 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the lottery sector is 5,256. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the lottery industry is minus 1,239. The sum of the average annual direct, indirect, and induced employment is 4,466.

Figure 145: Economic and fiscal impacts of retail lottery industry, 2012-2060, strong growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	75.060
Average Annual Population	Thousands	117.469
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	349.330
Cumulative Personal Income	Billions of Fixed (2012) Dollars	347.93
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.551

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the retail lottery industry is projected to support an annual average of 75,060 jobs in Florida under strong economic growth assumptions. The cumulative GSP is \$349.3 billion and personal income is \$347.9 billion. The average annual tax revenues generated from the indirect and induced impacts of the retail lottery industry between FY 2013 and FY 2060 are \$551 million.

Figure 146: Top 12 Florida industries with largest average employment impact from retail lottery, 2012-2060, strong growth

Industry category, with NAICS code	Units	2012-2060
Retail trade (44-45)	Thousands (Jobs)	41.473
Construction (23)	Thousands (Jobs)	9.160
Food services and drinking places (722)	Thousands (Jobs)	2.111
Computer systems design and related services (5415)	Thousands (Jobs)	2.058
Offices of health practitioners (6211-6213)	Thousands (Jobs)	1.618
Architectural, engineering, and related services (5413)	Thousands (Jobs)	1.433
Nursing and residential care facilities (623)	Thousands (Jobs)	1.362
Hospitals (622)	Thousands (Jobs)	1.132
Wholesale trade (42)	Thousands (Jobs)	1.112
Educational services (61)	Thousands (Jobs)	1.098
Home health care services (6216)	Thousands (Jobs)	0.948
Real estate (531)	Thousands (Jobs)	0.866

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 146 shows the private non-farm industries with largest average annual employment impact. Aside from Retail Trade, which is the direct impact for retail lottery, the rest are the top industries that are reliant on the retail lottery industry in Florida. Some of these, such as Wholesale Trade and Computer Systems Design Services, are intermediate input suppliers to the retail lottery industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (retail lottery) or indirect jobs.

Figure 147: Average annual employment by demand source from retail lottery, 2012-2060, strong growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	74.847
Intermediate Demand Employment	Thousands (Jobs)	9.418
Local Consumption Demand Employment	Thousands (Jobs)	15.671
Government Demand Employment	Thousands (Jobs)	0.070
Investment Activity Demand Employment	Thousands (Jobs)	16.645
Exports Employment	Thousands (Jobs)	-6.055
Exogenous Industry Sales Employment	Thousands (Jobs)	39.099

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 147 is a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct retail lottery employment. It can also be interpreted as the direct input we entered into the model. The average annual direct retail lottery employment impact is 39,099 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the retail lottery sector is 9,418. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the retail lottery industry is 26,330. The sum of the average annual direct, indirect, and induced employment is 74,847.

Figure 148: Economic and fiscal impacts of Native American casinos industry, 2012-2060, strong growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	17.468
Average Annual Population	Thousands	24.983
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	157.289
Cumulative Personal Income	Billions of Fixed (2012) Dollars	95.689
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Billions of Fixed (2012) Dollars	0.364

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the Native American casinos industry is projected to support an annual average of 17,468 jobs in Florida under strong economic growth assumptions. The cumulative GSP is \$157.3 billion and personal income is \$95.7 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of the Native American casinos industry between FY 2013 and FY 2060 are \$364 million.

Figure 149: Top 12 Florida industries with largest average employment impact from Native American casinos, 2012-2060, strong growth

Industry category, with NAICS code	Units	2012-2060
Accommodation (721)	Thousands (Jobs)	9.918
Construction (23)	Thousands (Jobs)	0.851
Food services and drinking places (722)	Thousands (Jobs)	0.792
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.713
Retail trade (44-45)	Thousands (Jobs)	0.330
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.281
Nursing and residential care facilities (623)	Thousands (Jobs)	0.224
Employment services (5613)	Thousands (Jobs)	0.215
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.205
Hospitals (622)	Thousands (Jobs)	0.180
Wholesale trade (42)	Thousands (Jobs)	0.164
Advertising and related services (5418)	Thousands (Jobs)	0.151

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 149 shows the private non-farm industries with largest average annual employment impact. Aside from Accommodation, which is the direct impact for this analysis, the rest are the top industries that are reliant on the Native American casinos industry in Florida. Some of these, such as Services to Buildings and Dwellings and Business Support Services, are intermediate input suppliers to the gaming industry. Others, such as Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (Native American casinos) or indirect jobs.

Figure 150: Average annual employment by demand source from Native American casinos, 2012-2060, strong growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	14.533
Intermediate Demand Employment	Thousands (Jobs)	5.145
Local Consumption Demand Employment	Thousands (Jobs)	0.987
Government Demand Employment	Thousands (Jobs)	0.300
Investment Activity Demand Employment	Thousands (Jobs)	0.672
Exports Employment	Thousands (Jobs)	-3.563
Exogenous Industry Sales Employment	Thousands (Jobs)	10.993

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 150 provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct Native American casinos employment. It can also be interpreted as the direct input we entered into the model. The average annual direct Native American casinos employment impact is 10,993 jobs and the average annual indirect employment (Intermediate Demand Employment) supported by the gaming sector is 5,145. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the Native American casinos industry is minus 1,605. The sum of the average annual direct, indirect, and induced employment is 14,533.

Figure 151: Economic and fiscal impacts of Floridians’ out-of-state gaming spending, 2012-2060, strong growth

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	2.655
Average Annual Population	Thousands	4.263
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	14.138
Cumulative Personal Income	Billions of Fixed (2012) Dollars	13.334
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Millions of Fixed (2012) Dollars	24.474

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, if out-of-state gambling dollars by Florida residents were to instead remain in Florida, this spending would support an annual average of 2,655 jobs in Florida under strong economic growth assumptions. The cumulative GSP is \$14.1 billion and personal income is \$13.3 billion. The average annual tax revenues generated from the indirect and induced impacts of the out-of-state gaming spending between FY 2013 and FY 2060 are \$24.5 million.

Figure 152: Top 12 Florida industries with largest average employment impact from Floridians’ out-of-state gaming spending, 2012-2060, strong growth

Industry category, with NAICS code	Units	2012-2060
Retail trade (44-45)	Thousands (Jobs)	0.467
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.383
Food services and drinking places (722)	Thousands (Jobs)	0.157
Construction (23)	Thousands (Jobs)	0.145
Private households (814)	Thousands (Jobs)	0.120
Nursing and residential care facilities (623)	Thousands (Jobs)	0.094
Wholesale trade (42)	Thousands (Jobs)	0.094
Hospitals (622)	Thousands (Jobs)	0.088
Real estate (531)	Thousands (Jobs)	0.075
Educational services (61)	Thousands (Jobs)	0.065
Personal care services (8121)	Thousands (Jobs)	0.064
Home health care services (6216)	Thousands (Jobs)	0.062

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 152 shows the private non-farm industries that would have been impacted if Floridians’ out-of-state gaming spending were brought back to Florida. Many of these industries, such as Retail Trade, Food Services and Drinking Places, and Private Households, are commonly supported by local spending.

Figure 153: Average annual employment by demand source from Floridians' out-of-state gaming spending, 2012-2060, strong growth

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	2.585
Intermediate Demand Employment	Thousands (Jobs)	0.428
Local Consumption Demand Employment	Thousands (Jobs)	2.185
Government Demand Employment	Thousands (Jobs)	0.011
Investment Activity Demand Employment	Thousands (Jobs)	0.224
Exports Employment	Thousands (Jobs)	-0.262
Exogenous Industry Sales Employment	Thousands (Jobs)	0.000

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 153 provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents direct employment. It can also be interpreted as the direct input we entered into the model. The average annual direct employment impact is 0 jobs because we did not use any employment policy variables to model this consumption reallocation of Floridians' out-of-state gaming spending. The average annual indirect employment (Intermediate Demand Employment) is 428. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact is 2,157. The sum of the average annual direct, indirect, and induced employment is 2,585.

4. Out-of-State Gambling Spending Contribution

While the previous section evaluates the impacts of the total Florida gaming sector as well as the substitution effects of Floridians' gambling spending, we carried out another simulation to specifically assess at the contribution of gambling spending from out of state (non-Florida residents). For this simulation, we assume 5 percent of the GGR to the pari-mutuel was from out of state, 2 percent of the net lottery sales to the lottery (excluding retailers) was from out of state, and 15 percent of the GGR to Native American casinos as from out of state.

Figure 154: Economic and fiscal impacts from non-resident gambling spending in Florida in 2012

Summary	Units	2012
Total Employment	Thousands (Jobs)	3.857
Population	Thousands	0.943
Gross State Product (GSP)	Billions of Fixed (2012) Dollars	0.379
Personal Income	Billions of Fixed (2012) Dollars	0.183
State Tax Revenues (fiscal year 2013)	Millions of Fixed (2012) Dollars	92.188

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 154 exhibits the total economic and fiscal impacts generated from non-Florida residents' gambling spending in 2012. The total non-resident gambling spending supports a total of 3,857 jobs in Florida. The associated GSP is \$379 million and it generated \$183 million in personal income. The tax revenue generated from the direct, indirect, and induced impacts of the non-resident gambling spending in FY 2013 is \$92.2 million.

Figure 155: Top 12 Florida industries with largest employment impact from non-resident gambling spending in 2012

Industry category, with NAICS code	Units	2012
Accommodation (721)	Thousands (Jobs)	1.209
Amusement, gambling, and recreation industries (713)	Thousands (Jobs)	0.224
Retail trade (44-45)	Thousands (Jobs)	0.216
Construction (23)	Thousands (Jobs)	0.204
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.135
Food services and drinking places (722)	Thousands (Jobs)	0.132
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.088
Real estate (531)	Thousands (Jobs)	0.068
Wholesale trade (42)	Thousands (Jobs)	0.062
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.054
Private households (814)	Thousands (Jobs)	0.041
Employment services (5613)	Thousands (Jobs)	0.037

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 155 shows the private non-farm industries that are dependent on the gaming industry (Accommodation and Amusement, Gambling, and Recreation Industries). Some of these, such as Services to Buildings and Dwellings and Business Support Services, are intermediate input suppliers to the gaming industry. Others, such as Retail Trade and Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (gaming) or indirect jobs.

Figure 156: Employment by demand source from non-resident gambling spending in 2012

Breakdown of Direct, Indirect, and Induced Employment	Units	2012
Private Non-Farm Employment	Thousands (Jobs)	3.114
Intermediate Demand Employment	Thousands (Jobs)	0.912
Local Consumption Demand Employment	Thousands (Jobs)	0.630
Government Demand Employment	Thousands (Jobs)	0.084
Investment Activity Demand Employment	Thousands (Jobs)	0.108
Exports Employment	Thousands (Jobs)	-0.113
Exogenous Industry Sales Employment	Thousands (Jobs)	1.492

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good services from outside Florida

Figure 156 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct pari-mutuel, lottery, and Native American casinos employment. It can also be interpreted as the direct input we entered into the model. The direct employment impact is 1,492 jobs in 2012, and the indirect employment (Intermediate Demand Employment) supported by non-resident gambling spending is 912. The induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the non-

resident gambling spending is 709. The sum of the direct, indirect, and induced employment is 3,114.

Figure 157: Economic and fiscal impacts from non-resident gambling spending, 2012-2060

Summary	Units	2012-2060
Average Annual Employment	Thousands (Jobs)	5.024
Average Annual Population	Thousands	7.239
Cumulative Gross State Product	Billions of Fixed (2012) Dollars	36.513
Cumulative Personal Income	Billions of Fixed (2012) Dollars	25.409
Average Annual State Tax Revenues (fiscal year 2013 to 2060)	Millions of Fixed (2012) Dollars	167.445

Source: Regional Economic Models Inc., Spectrum Gaming Group

Between 2012 and 2060, the total non-Florida residents gambling spending support an annual average of 5,024 jobs in Florida. The cumulative GSP is \$36.5 billion and personal income is \$25.4 billion. The average annual tax revenues generated from the direct, indirect, and induced impacts of between FY 2013 and 2060 are \$167.4 million.

Figure 158: Top 12 Florida industries with largest employment impact from non-resident gambling spending, 2012-2060

Industry category, with NAICS code	Units	2012-2060
Accommodation (721)	Thousands (Jobs)	1.561
Construction (23)	Thousands (Jobs)	0.288
Retail trade (44-45)	Thousands (Jobs)	0.246
Food services and drinking places (722)	Thousands (Jobs)	0.209
Offices of health practitioners (6211-6213)	Thousands (Jobs)	0.156
Services to buildings and dwellings (5617)	Thousands (Jobs)	0.155
Nursing and residential care facilities (623)	Thousands (Jobs)	0.101
Wholesale trade (42)	Thousands (Jobs)	0.075
Hospitals (622)	Thousands (Jobs)	0.074
Management, scientific, and technical consulting services (5416)	Thousands (Jobs)	0.064
Business support services; Investigation and security services; Other support services (5614, 5616, 5619)	Thousands (Jobs)	0.063
Home health care services (6216)	Thousands (Jobs)	0.060

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 158 shows the private non-farm industries that are dependent on the gaming industry (Accommodation and Amusement, Gambling, and Recreation Industries). Some of these, such as Services to Buildings and Dwellings and Business Support Services, are intermediate input suppliers to the gaming industry. Others, such as Retail Trade and Food Services and Drinking Places, provide goods and services to consumers whose income is dependent on the direct (gaming) or indirect jobs.

Figure 159: Employment by demand source from non-resident gambling spending, 2012-2060

Breakdown of Direct, Indirect, and Induced Employment	Units	2012-2060 Average
Private Non-Farm Employment	Thousands (Jobs)	3.851
Intermediate Demand Employment	Thousands (Jobs)	1.212
Local Consumption Demand Employment	Thousands (Jobs)	1.112
Government Demand Employment	Thousands (Jobs)	0.120
Investment Activity Demand Employment	Thousands (Jobs)	0.232
Exports Employment	Thousands (Jobs)	-0.718
Exogenous Industry Sales Employment	Thousands (Jobs)	1.893

Source: Regional Economic Models Inc.

Notes: Direct Employment = direct amount of employment entered into the model; Intermediate Demand Employment = employment needed to satisfy demand for material inputs to the production of final goods; Local Consumption Employment = Employment needed to satisfy demand for consumer goods; Government Demand Employment = Employment needed to satisfy demand for goods and services by government expenditures; Investment Activity Demand Employment = Employment needed to satisfy demand for residential and non-residential capital goods; Export Demand Employment = Employment needed to satisfy demand for a region's good services from outside Florida

Figure 159 above provides a breakdown of private non-farm employment by demand source. The Exogenous Industry Sales Employment represents the direct pari-mutuel, lottery, and Native American casinos employment. It can also be interpreted as the direct input we entered into the model. The average annual direct employment impact is 1,893 jobs, and the average annual indirect employment (Intermediate Demand Employment) supported by non-resident gambling spending is 1,212. The average annual induced employment (sum of Local Consumption Demand, Government Demand, Investment Activity Demand, and Exports Demand Employment) impact as a result of the non-resident gambling spending is 746. The sum of the direct, indirect, and induced employment is 3,851.

5. Hialeah Park Construction Impacts, 2011-2013

Similar to the previous section, we modeled the construction of Hialeah Park separately from the gambling industry assessment. Instead of modeling the impact of construction for only 2012, however, we modeled the construction activity in its entirety, starting in 2011 and ending in 2013, under the assumption that the construction duration is 24 months starting in summer of 2011. The total cost of construction for Hialeah Park is \$63.36 million, with an average annual construction employment of 210.

Figure 160: Economic and fiscal impacts of Hialeah Park construction, 2011-2013

Summary	Units	2011-2013
Average Annual Employment	Jobs	248
Average Annual Population	Individuals	107
Cumulative Gross State Product	Millions of Fixed (2012) Dollars	60.730
Cumulative Personal Income	Millions of Fixed (2012) Dollars	38.513
Cumulative State Tax Revenues (fiscal year 2013 to 2014)	Millions of Fixed (2012) Dollars	1.445

Source: Regional Economic Models Inc., Spectrum Gaming Group

The construction activity from 2011 to 2013 generates an annual average of 248 jobs, a total of \$60.7 million in GSP, and \$38.5 million in personal income in Florida. It also induces \$1.45 million in state tax revenue from FY 2013 to FY 2014.

Conclusion

This analysis examines the gambling industry and its economic and fiscal contribution to Florida. The first part of the REMI economic impact analysis (“Assessing the Florida’s Existing Economic Base, Now and Future”) illustrates that although the various gambling subsectors (racinos/pari-mutuels, lottery, and Native American casinos) account for only a fraction of employment and wages within its respective aggregate sector, they are highly productive industries and generate a considerable amount of direct economic output to Florida.

In addition, the gaming industry has consistently brought revenue for the State of Florida historically. Below is tax collection information from FY 2000:

Figure 161: FY 2000 to FY 2012 tax revenue by gaming sectors

	Units	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06
Indian Gaming	Millions of Current Dollars	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pari-mutuel Fees, Licenses, Taxes Total	Millions of Current Dollars	57.5	34.7	35.1	32.4	32.1	32.0	33.6
Slot Machine Total	Millions of Current Dollars	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lottery Total	Millions of Current Dollars	1,159.5	1,157.3	1,181.0	1,327.6	1,361.9	1,393.4	1,639.3
	Units	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	
Indian Gaming	Millions of Current Dollars	0.0	0.0	0.0	287.5	140.4	150.0	
Pari-mutuel Fees, Licenses, Taxes Total	Millions of Current Dollars	33.9	33.8	29.2	26.6	26.0	26.9	
Slot Machine Total	Millions of Current Dollars	61.6	132.3	114.0	153.0	149.4	156.5	
Lottery Total	Millions of Current Dollars	1,681.0	1,602.5	1,590.8	1,550.7	1,506.9	1,671.3	

Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 162: Summary of employment; tax revenue results dollars in fixed 2012 millions

2012	Direct Employment	Indirect Employment	Induced Employment	State Tax Revenues (FY 2013) (M)
Pari-mutuel	4,953	1,659	1,309	\$206.6
Lottery	408	2,267	-111	\$1,882.0
Retail Lottery	39,900	4,206	14,042	\$123.7
Native American Casinos	10,387	6,137	3,785	\$293.3
Floridians' Out-of-State Gaming Spending	0	693	3,143	\$15.4
2012-2060 Slow Growth	Average Annual Direct Employment	Average Annual Indirect Employment	Average Annual Induced Employment	Average Annual State Tax Revenues (FY2013-2060) (M)
Pari-mutuel	5,449	1,757	-1,298	\$587
Lottery	449	5,295	969	\$3,452
Retail Lottery	39,099	10,148	28,918	\$581
Native American Casinos	10,933	6,246	769	\$401
Floridians' Out-of-State Gaming Spending	0	488	2,334	\$28.6
2012-2060 Normal Growth	Average Annual Direct Employment	Average Annual Indirect Employment	Average Annual Induced Employment	Average Annual State Tax Revenues (FY 2013-2060) (M)
Pari-mutuel	5,449	1,607	-1,939	\$581
Lottery	449	5,288	-1,106	\$3,561
Retail Lottery	39,099	9,775	27,674	\$590
Native American Casinos	10,933	5,660	-473	\$374
Floridians' Out-of-State Gaming Spending	0	455	2,239	\$27
2012-2060 Strong Growth	Average Annual Direct Employment	Average Annual Indirect Employment	Average Annual Induced Employment	Average Annual State Tax Revenues (FY 2013- 2060) (M)
Pari-mutuel	5,449	1,478	-2,506	\$575
Lottery	449	5,256	-1,239	\$3,645
Retail Lottery	39,099	9,418	26,330	\$551
Native American Casinos	10,933	5,145	-1,605	\$364
Floridians' Out-of-State Gaming Spending	0	428	2,157	\$25

Source: Regional Economic Models Inc., Spectrum Gaming Group

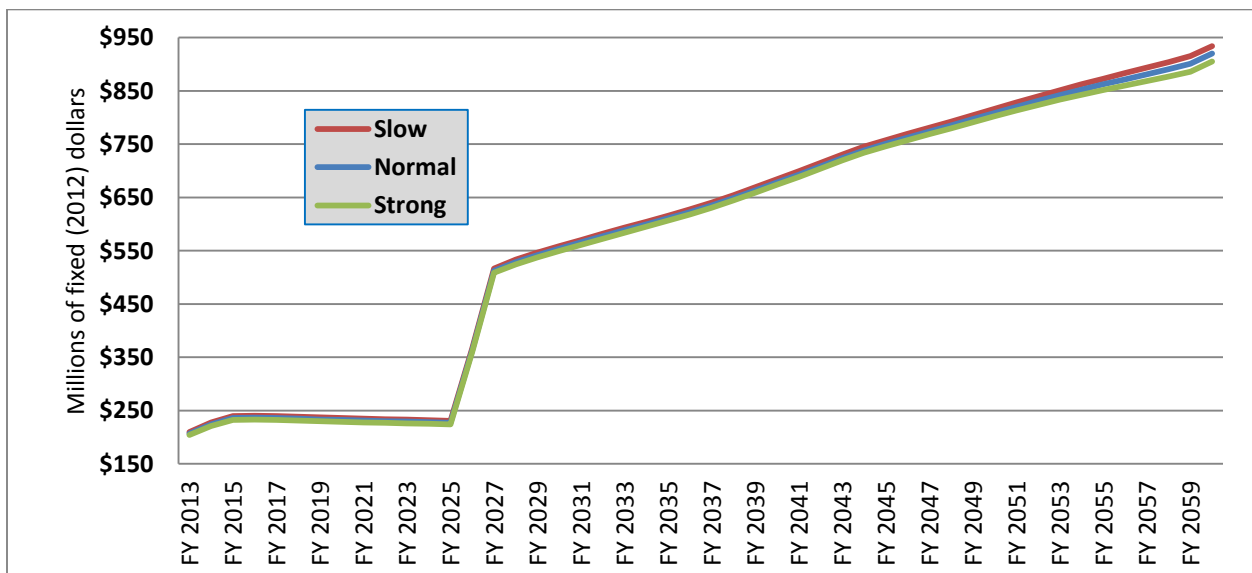
The second section (“B. Discussion of Components of Economic and Fiscal Impacts”) examines the total economic and fiscal impacts of the gambling industry by subsector in 2012. The analysis of the existing gambling industry reveals the nature of each of the subsectors in a snapshot in time. This snapshot tells us how many jobs exist in each subsector, how it uses intermediate inputs, and how the reallocation of consumer dollars toward it impacts the economy. The direct jobs show the employment in each subsector. The indirect jobs are those that result from business-to-business sales. In other words, the indirect jobs show us the total supply chain impacts of the change in business activity.

Finally, perhaps the one result that stands out the most is in induced employment. It mainly shows the change in the number of jobs supported by local consumption. We know that

households have a fixed budget, so every consumption decision implies the foregoing of an alternative purchase. Specifically in this case, if households allocate part of their budget toward gambling then they must forego other consumption. Much of the foregone spending is assumed to be from gambling out of state. The negative induced employment numbers mainly represent jobs that household spending could have supported if spending on gambling were not available. It should be noted that induced employment includes other categories which are noted in the body of the report but in these simulations are quite small in relation to local consumption demand.

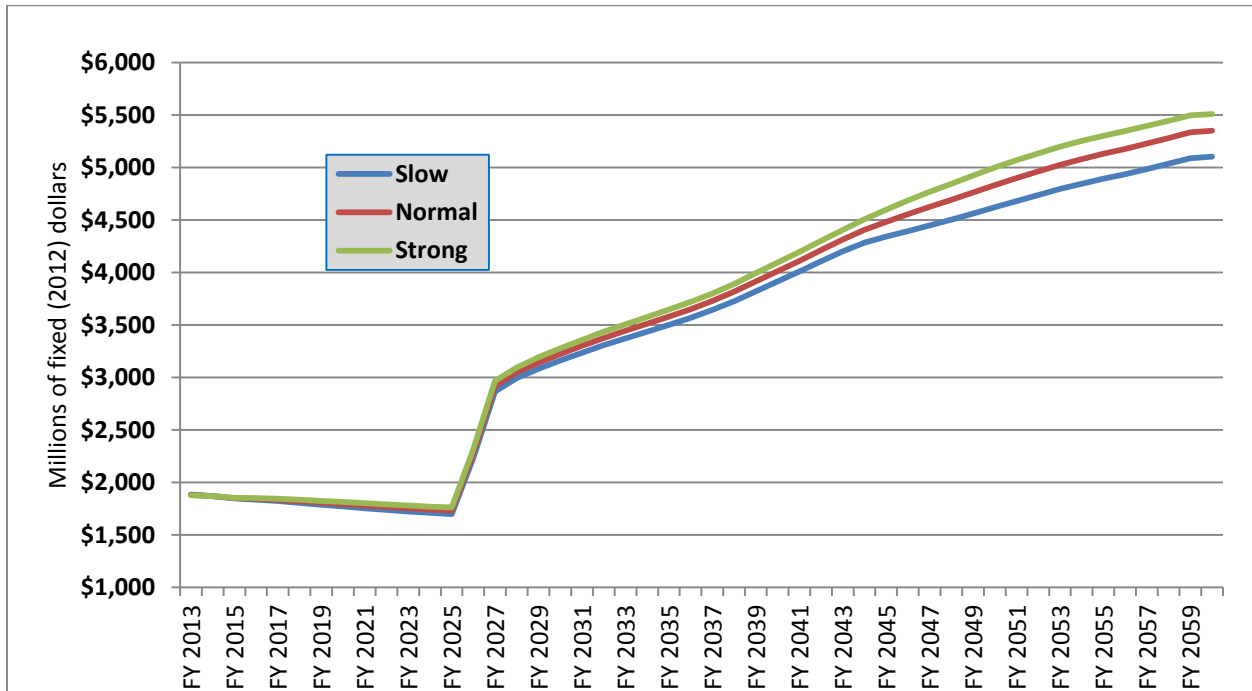
The next five charts show the changes in tax revenue resulting from the counterfactual scenarios that REMI ran under the three different growth scenarios. All scenarios, except Retail Lottery, display a similar shape due to the calibration of the underlying tax module of Tax-PI. As stated earlier, REMI used the budget provided by EDR in order to be consistent with the work already being done in Florida. EDR forecasted the state’s revenue out to 2025 using its internal expertise and Florida’s Long-Term Revenue Analysis. That forecast is driving the results up to that date. After 2025, EDR’s calibration of the drivers of tax revenue drives the forecast for the remainder of the analysis period. The change between the different methods employed by EDR can be seen in the graphs in the transitional year of 2025-2026. EDR also built in the revenue effects of the expiration of the gaming Compact with the Seminole Tribe in 2015. Lastly, the reason that the Retail Lottery scenario does not have the bump in 2025 is that there are no direct tax revenue changes as part of the simulation inputs unlike in the other four sectors.

Figure 163: Summary of state tax revenue growth scenarios – pari-mutuel



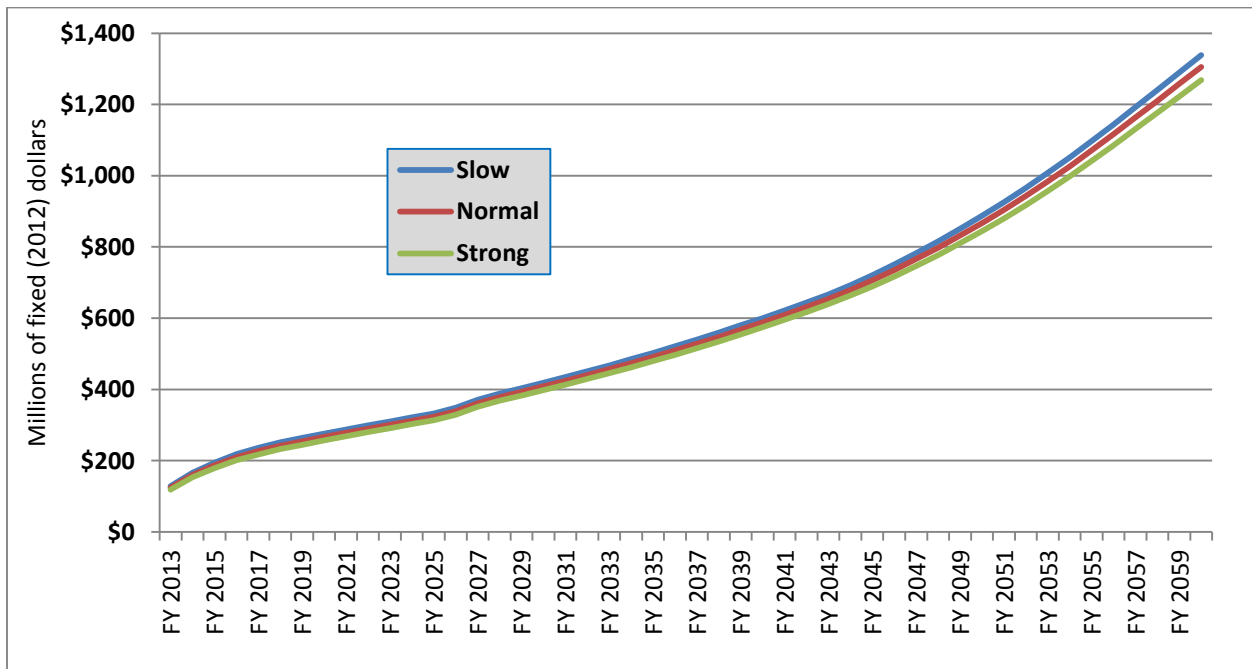
Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 164: Summary of state tax revenue growth scenarios – lottery



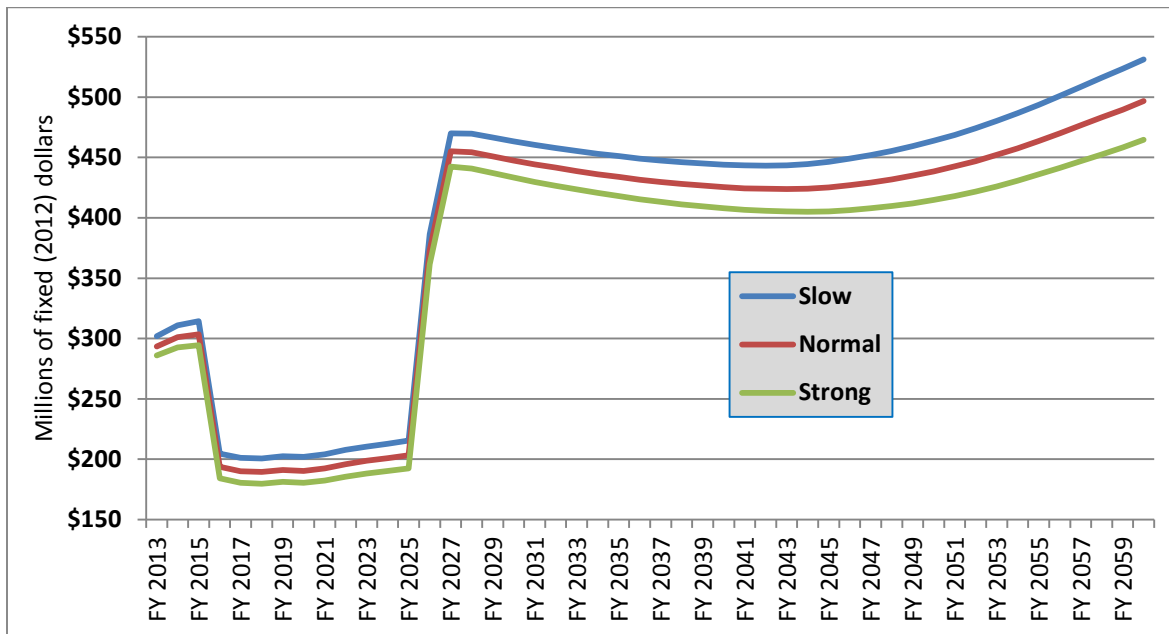
Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 165: Summary of state tax revenues – retail lottery



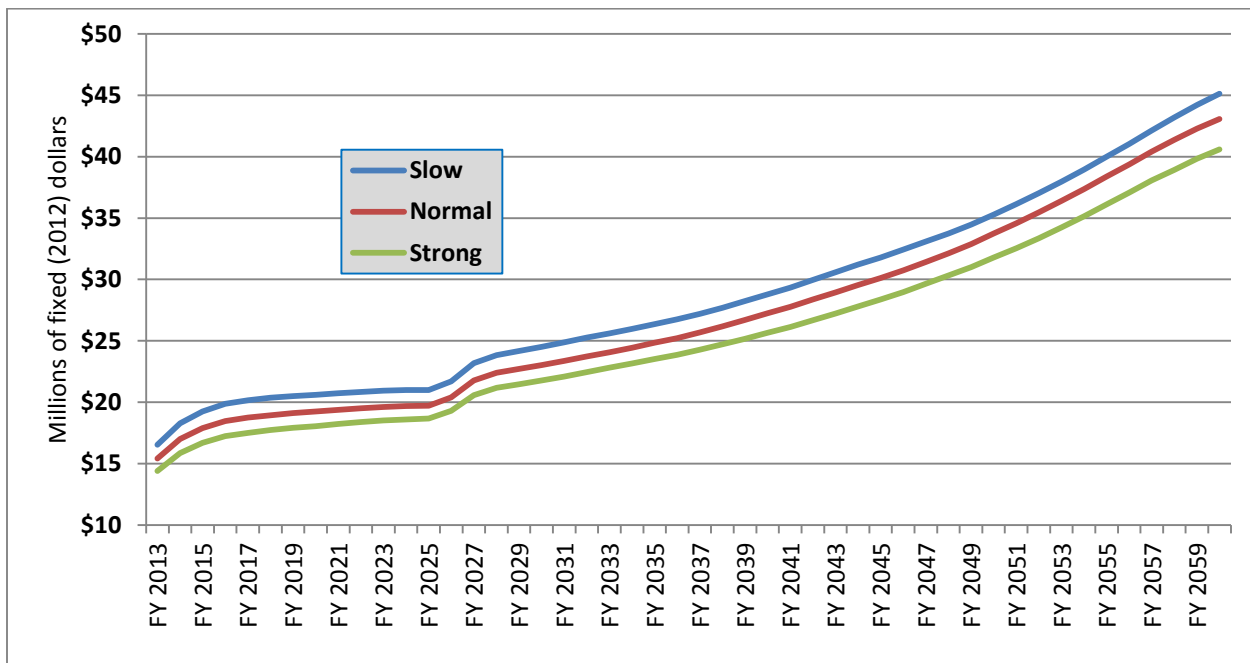
Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 166: Summary of state tax revenues – Native American casinos



Source: Regional Economic Models Inc., Spectrum Gaming Group

Figure 167: Summary of state tax revenues – Floridians’ out-of-state gaming spending



Source: Regional Economic Models Inc., Spectrum Gaming Group

The third section (“C. Assessment of Economic, Fiscal Impacts over Time”) evaluates the total economic and fiscal impacts of the gambling industry by subsector from 2012 through 2060 under three different economic growth assumptions: 5 percent slower, normal (per EDR benchmark), and 5 percent stronger. A cursory examination of the results under the three

scenarios reveals them to be largely the same, which is due to the nature of the simulations. A key point to remember is that the simulation inputs do not change under the various growth assumptions, meaning that we are applying the same shock to three different national economic bases. Any divergence in the results is due to differences in how the same shock ripples through the three economies.

Structurally, we notice that the average results over the 49-year period resemble the snapshot in 2012. The fundamental makeup of these sectors is not expected to change significantly over the forecast horizon. Therefore, we do not expect to see large variations in the relationship between direct, indirect, and induced employment. We see more negative induced employment numbers than in the 2012 snapshot. That difference is due to the growth of in-state gambling spending relative to out-of-state spending.

An interesting result is seen in the comparison of the same result over the three growth scenarios. We can see that the results tend to be biggest in the slow scenario and smallest in the strong scenario. This can seem counter-intuitive. We have previously established that the inputs are the same in each simulation and, so, any differences are due to ripple effects, not direct inputs. So why would the ripple effects be smaller in the strong growth case? The answer boils down to the available slack in the economy. In a slower economy, additional labor is more readily available and costs and prices are lower. These factors mean that the same shock in a slightly weaker economy will have greater job, income, consumption, and business activity impacts, as there would be fewer constraints to growth.

About This Report

This report was prepared by Spectrum Gaming Group, an independent research and professional services firm founded in 1993 that serves private- and public-sector clients worldwide. Our professionals have backgrounds in regulation, economic and financial analysis, law enforcement, gaming operations, market research and journalism.

Spectrum neither supports nor opposes legalized gambling or the expansion of it. Neither the company nor its employees hold a beneficial interest in any casino operating companies or gaming equipment manufacturers or suppliers. We employ only senior-level executives and associates who have earned reputations for honesty, integrity and the highest standards of professional conduct. Our work is never influenced by the interests of past or potentially future clients.

Each Spectrum project is customized to our client's specific requirements and developed from the ground up. Our findings and conclusions are based solely on our research, analysis and experience. Our mandate is not to tell clients what they want to hear; we tell them what they need to know. We will not accept, and have never accepted, engagements that seek a preferred result.

Spectrum's public-sector clients have included agencies or branches for 14 US state or territory governments and several international government agencies. Our private-sector clients have included most major casino companies, as well as investment firms, developers, law firms and architects. Our past clients in Florida, which have been disclosed to the Legislature in connection with this engagement, include Genting, Hialeah Park, the Seminole Tribe of Florida, and Sunrise Sports & Entertainment.

Spectrum executives have testified before the following government bodies:

- Georgia Joint Committee on Economic Development and Tourism
- Illinois Gaming Board
- Indiana Horse Racing Commission
- Indiana Gaming Study Commission
- International Tribunal, The Hague
- Massachusetts Gaming Commission
- Massachusetts Joint Committee on Bonding, Capital Expenditures, and State Assets
- New Hampshire Gaming Study Commission
- National Gambling Impact Study Commission
- New Jersey Assembly Tourism and Gaming Committee
- New Jersey Senate Legislative Oversight Committee
- New Jersey Senate Wagering, Tourism & Historic Preservation Committee
- Ohio Casino Control Commission

- Ohio House Economic Development Committee
- Ohio Senate Oversight Committee
- Pennsylvania Gaming Control Board
- US House Congressional Gaming Caucus
- US Senate Indian Affairs Committee
- US Senate Select Committee on Indian Gaming
- US Senate Subcommittee on Organized Crime

Disclaimer

Spectrum has made every reasonable effort to ensure that the data and information in this study reflect the most accurate and timely information possible. The data are believed to be generally reliable. This study is based on estimates, assumptions, and other information developed by Spectrum from its independent research efforts, general knowledge of the gaming industry, and secondary research. Spectrum shall not be responsible for any inaccuracies in reporting by the Client or its agents and representatives, or any other data source used in preparing or presenting this study. The data presented in this study were collected through the cover date of this report. Spectrum has not undertaken any effort to update this information since this time.

Some significant factors that are unquantifiable and unpredictable – including, but not limited to, economic, governmental, managerial and regulatory changes; and acts of nature – are qualitative by nature, and cannot be readily used in any quantitative projections.

No warranty or representation is made by Spectrum that any of the projected values or results contained in this study will actually be achieved. We shall not be responsible for any deviations in the project's actual performance from any predictions, estimates, or conclusions contained in this study.

This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

Appendix I: Research Interviews

Spectrum Gaming Group staff and associates have interviewed the following through June 28, 2013, as part of our research for the Florida Gaming Study. The interviews were conducted in person, by telephone and/or by email. The purpose of some of the interviews may have been primarily for Part 1-B or Part II, which are being submitted to the State on or before October 1, 2013.

Last	First	Affiliation	Title	Date
Acosta	David	Ohio Casino Control Commission	Director of Licensing	May 20, 2013
Adams	Maureen	Calder Casino & Race Course	Senior Director of Finance	May 2, 2013
Adkins	Dan	Mardi Gras Casino	COO	May 1, 9, 2013
Allen	James	Seminole Gaming	CEO	May 1, 2013
Appleton	Doreen	Pennsylvania Gaming Control Board	Special Assistant, Communications	May 20, 2013
Barnes	Connie	Florida Lottery	Director of Communications	May 17, 2013
Bartek	David	Loews Hotels at Universal Orlando	Area Managing Director	May 29, 2013
Biegalski	Leon	Division of Pari-Mutuel Wagering	Director	May 8, May 22, 2012
Bissett	William	Daytona Greyhound Track	Adviser	May 23, 2013
Brower	Chaz	Hamilton Jai Alai and Poker	Jai Alai player	May 10, 2013
Brunetti	John	Hialeah Park	Chairman of the Board	May 9, June 4, 2013
Calabro	Steve	Hialeah Park	Vice President, General Manager Gaming	May 9, 2013
Carbone	Noah	Palm Beach Kennel Club	Cardroom Manager	May 15, 2013
Carroll	Sarrah	Florida Sheriff's Association	Assistant Executive Director of Operations	May 23, 2013
Cebbalos	Orlando	Link Construction	Project Manager	May 21, 2013
Cliburn	Tom	Hialeah Race Track Casino	Comptroller	June 4, 2013
Collett	William	Casino Miami Jai Alai	President & CEO	May 2, 2013
Combest	Phil	Florida Horsemen's Benevolent & Protective Association	President	May 2, 2013
Connors	Brian	Massachusetts Gaming Commission	Detective Lieutenant	June 14, 2013
Conroy	Dennis	<i>Bingo Bugle Magazine</i>	Publisher	May 19, 2013
Cory	Jack	Florida Greyhound Association	Lobbyist	May 10, 2013
Couch	Michael	Gulfstream Race Course	Gaming Director	May 12, 2013
Cox	Wesley	North Florida Horsemen's Association	Chairman	May 12, 2013
Davis	Tama	Ohio Casino Control Commission	Director of Communications	June 17, 2013
Deluca	Mike	Mardi Gras Casino	Slot Director	May 9, 2013
Dissinger	Donald	Ewing Cole Architect	Senior Vice President	May 20-28, 2013
Dunbar	Marc	Jones Walker	Partner	May 2, 2013
Fisch	Steve	Florida Quarter Horse Breeders' and Owners Association	President	May 13, 2013
Fontaine	Gale	Florida Arcade and Bingo Association	President	May 21, 2013
Forrest	Mat	Palm Beach Kennel Club	Adviser	May 15, 2013

Last	First	Affiliation	Title	Date
Fowler	Pat	Florida Council on Compulsive Gambling	Exec. Dir.	May 24, 2013
Giery	Adam	Florida Chamber of Commerce	Director of Talent, Education and Quality of Life	May 23, 2013
Glenn	Michael	Palm Beach Kennel Club	General Manager	May 15, 2013
Harbach	Doug	Pennsylvania Gaming Control Board	Director of Communications	May 21, 2013
Harris	Glenda	4 Star Bingo	Owner/Operator	May 22, 2013
Havenick	Alexander	Magic City Casino	VP, Operations and Legal	May 8, 2013
Havenick	Isadore	Magic City Casino	VP, Director of Governmental Affairs	April 26, 2013
Hellkamp	Erin	Central Florida Hotel & Lodging Association	Public Policy Director	May 29, 2013
Heneghan	Dan	New Jersey Casino Control Commission	Public Information Officer	May 20, 2013
Hogenmuller	John	Florida Prosecuting Attorneys Association	Executive Director	May 20, 2013
Hudson	Ian	Iowa Racing and Gaming Commission	Executive Office	May 21, 2013
Huscroft	Sonya	VKGS LLC, d/b/a Video King	Director of Compliance	May 22, 2013
Jenkins	Ed	Seminole Tribal Gaming Commission	Director of Compliance and Regulations	May 20, 2013
Jonas	Dave	Phoenix Gaming & Entertainment	President	May 2, 2013
Jones	Carol	Iowa Racing and Gaming	Director of Operations	June 17, 2013
Keith	Kocher	Kansas Lottery	Director of Gaming Facilities	May 20, 2013
Lawson	Kent	Department of Business & Professional Regulation	Secretary	April 30, 2013
Letson	Laura	Florida Council on Compulsive Gambling	Corporate Consultant	May 8, 13, 24, 2013
Licciardi	Daniel	Casino Miami Jai Alai	Chief Operating Officer	May 2, 2013
Love	Joe	Palm Beach Kennel Club	Director of Governmental Affairs	May 14, 15, 2013
Lupfer	Bill	Florida Attractions Association	President	May 23, 2013
Maladecki	Rich	Central Florida Hotel & Lodging Association	President/CEO	May 29, 2013
Manley	Mike	Florida Lottery	Director of Legislative Affairs	May 22, 2013
Martin	Jim	Florida Department of Law Enforcement	Attorney	June 17, 2013
Martinez	Felix	Link Construction	Chief Estimator	May 21, 2013
May	Steve	Association of Racing Commissioners International	Vice-President	May 29, 2013
McGarvey	Richard	Pennsylvania Gaming Control Board	Public Information Officer	June 14, 2013
McGee	Gene	Jacksonville Greyhound Racing Inc.	Adviser	May 30, 2013
McGregor	James	The Southern Economist LLC	Principal	May 20, 2013
McIntosh	Jeff	VKGS LLC d/b/a Video King	General Manager	May 22, 2013
McReynolds	John	Universal Parks & Resorts	Sr. Vice President of External Affairs	May 29, 2013
Miskell	Bill	Kansas Racing and Gaming Commission	Public Information Officer	May 20, June 17, 2013
Mitchell	Donn	Isle of Capri	Sr. Vice President	May 28, 2013
Ossip	Alon	Stronach Group	CEO	May 2, 2013
Peebles	Jack	Hialeah Park Casino	General Counsel	May 9, 2013
Pennachio	Joseph	Florida Standardbred Breeder's & Owner's Association	President	April 25, 2013

Last	First	Affiliation	Title	Date
Peoples	Jack	Hialeah Race Track Casino	Adviser	June 4, 2013
Pierce	Jennifer	Florida Horsemen's Benevolent and Protective Association	Adviser	May 12, 2013
Pottinga	Jetse	Melia Hotels	General Manager	May 29, 2013
Powell	Lonnie	Florida Thoroughbred Breeders' and Owners' Association	CEO	May 10, 2013
Quilty	Jim	Iowa Greyhound Owners' Association	Lawyer	May 13, 2013
Reside	Catherine	Mardi Gras Casino	Chief Operating Executive	May 9, 2013
Richards	Glenn	Hamilton Jai Alai and Poker	General Manager	May 9, 2013
Ridge	Doug	Orlando World Center Marriott Resort & Convention Center	General Manager	May 29, 2013
Ritvo	Tim	Stronach Group	Chief Operating Officer	May 2, 2013
Robinson	Mary Ann	Mardi Gras Casino	Chief Financial Officer	May 9, 2013
Sargent	Thea	Disney's Contemporary Resort	General Manager	May 29, 2013
Savin	Scott	Magic City Casino	CFO	April 26, May 8, 2013
Schmitzer	Miriam	Florida Lottery	Executive Assistant to the Secretary	May 23, 2013
Searcy	Brenda	Bingo at Four Corners	General Manager	May 21, 2013
Shelton	Jamie	Jacksonville Greyhound Racing Inc.	CFO	May 30, 2013
Shore	Jim	Seminole Tribe	General Counsel	May 1, 2013
Smoley	Sharon	Walt Disney Parks and Resorts U.S.	Government Relations Manager	May 29, 2013
Sowinski	John	No Casinos, Inc.	President	May 29, 2013
Spengler	Lisa	New Jersey Division of Gaming Enforcement	Public Information Officer	June 14, 2013
Stewart	Tim	VKGS LLC d/b/a Video King	President/CEO	May 22, 2013
Stirling	Kent	Florida Horsemen's Benevolent and Protective Association	Executive Director	May 2, 11, 2013
Tanner	Michael	US Trotting Association	Executive Director	May 24, 2013
Testa	Dan	Hialeah Park	Construction & Design	May 20, 2013
Theil	Carey	Grey2 K USA	Executive Director	May 17, 2013
Thomas	Chris	Bingo Magic of Lake Worth	Owner/Operator	May 21, 2013
Ventura	Tom	Ocala Breeders' Sales Company	President	May 20, 2013
Vergheze	Sam	Department of Business & Professional Regulation	Legislative Affairs Director	April 30, 2013
Vincent	Jackie	Maryland Lottery and Gaming Control Agency	Chief of Staff	June 17, 2013
Warfield	Cindy	VKGS LLC d/b/a Video King	General Manager	May 22, 2013
Wolf	Michael	Florida Arcade and Bingo Association	General Counsel	May 21, 2013
Woodburn	Jeffrey	Executive Office of the Governor	Deputy Policy Director	May 5-28, 2013
Wyre	Rob	Isle Casino Racing Pompano Park	General Manager	May 1, 13, 2013

Source: Spectrum Gaming Group

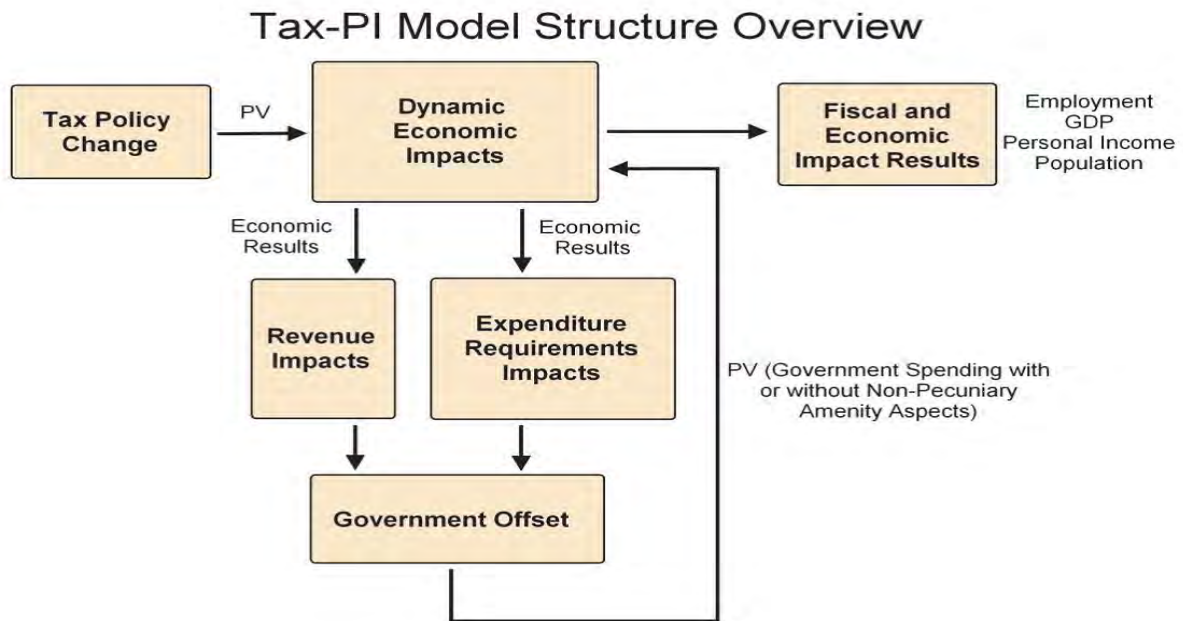
Appendix II: REMI Tax-PI Fiscal and Economic Analysis Tool

REMI's Tax-PI is a new tool for evaluating the total fiscal and economic effects of tax policy changes. Tax-PI is based on over 30 years of experience in modeling the economic effects of tax policy changes. As states begin to demand better methods for estimating the economic and fiscal impacts of alternative tax scenarios, they look to experts to respond with sophisticated, flexible and relevant tools that can meet their needs.

Tax-PI is a dynamic fiscal and economic impact model that captures the direct, indirect and induced fiscal and economic effects of taxation and other policy changes over multiple years (up to 2060). It can model the complete dynamic economic and demographic impacts of any manner of tax policy change. States need to thoroughly evaluate both the short- and long-term effects of any tax changes in order to best serve the needs of the people. Tax-PI allows state agencies to do this with a model backed by years of dependability and experience. Highlights include

- Budget Editor: Customizable table that users calibrate to reflect actual or projected revenue and expenditure details for the current, past or future fiscal years.
- Taxes: Dynamic capability to adjust state-specific tax revenues. Users assign tax-specific variables to each of the custom revenue categories in order to track the fiscal effects of policy changes along with the economic effects. There is also a built-in feedback mechanism that automatically feeds revenue impacts back into the model to account for price and disposable income changes, therefore adjusting government spending accordingly.

Figure 168: Tax-PI Structure



As Figure 168 shows, the methodology of Tax-PI revolves around the estimation of dynamic economic impacts. These impacts serve as the basis for the estimation of budgetary changes through the calibration done by REMI's economists and clients. For this analysis, REMI used a budget calibrated by Tax-PI users at the Office of Economic and Demographic Research. Prior to running simulations, the newest available year of revenue data is used to calibrate the budget. Each category is individually entered into Tax-PI. Then each revenue source is assigned an economic driver from the dynamic impact model that will form the basis of future estimates of the amount of revenue gained from that particular source. For example, the amount of sales tax revenue collected is connected to the amount of consumption in taxable categories in the state in that year as given by Tax-PI's baseline economic and demographic forecast. Using these two pieces of information (collections and driver), Tax-PI creates a quantified relationship between the two that can then predict changes in the future. A similar process is carried out for each revenue source. In Florida, the expenditures are mapped to specific revenue categories so the amount of government spending is tied to the availability of applicable revenues.

Detailed Model Methodology

Tax-PI is a structural economic forecasting and policy analysis model. It integrates input-output, computable general equilibrium, econometric and economic geography methodologies. The model is dynamic, with forecasts and simulations generated on an annual basis and behavioral responses to compensation, price, and other economic factors.

The model consists of thousands of simultaneous equations with a structure that is relatively straightforward. The exact number of equations used varies depending on the extent of

industry, demographic, demand, and other detail in the specific model being used. The overall structure of the model can be summarized in five major blocks: (1) Output and Demand, (2) Labor and Capital Demand, (3) Population and Labor Supply, (4) Compensation, Prices, and Costs, and (5) Market Shares. The blocks and their key interactions are shown in Figures 168 and 169.

Figure 169: Model Linkages

REMI Model Linkages (Excluding Economic Geography Linkages)

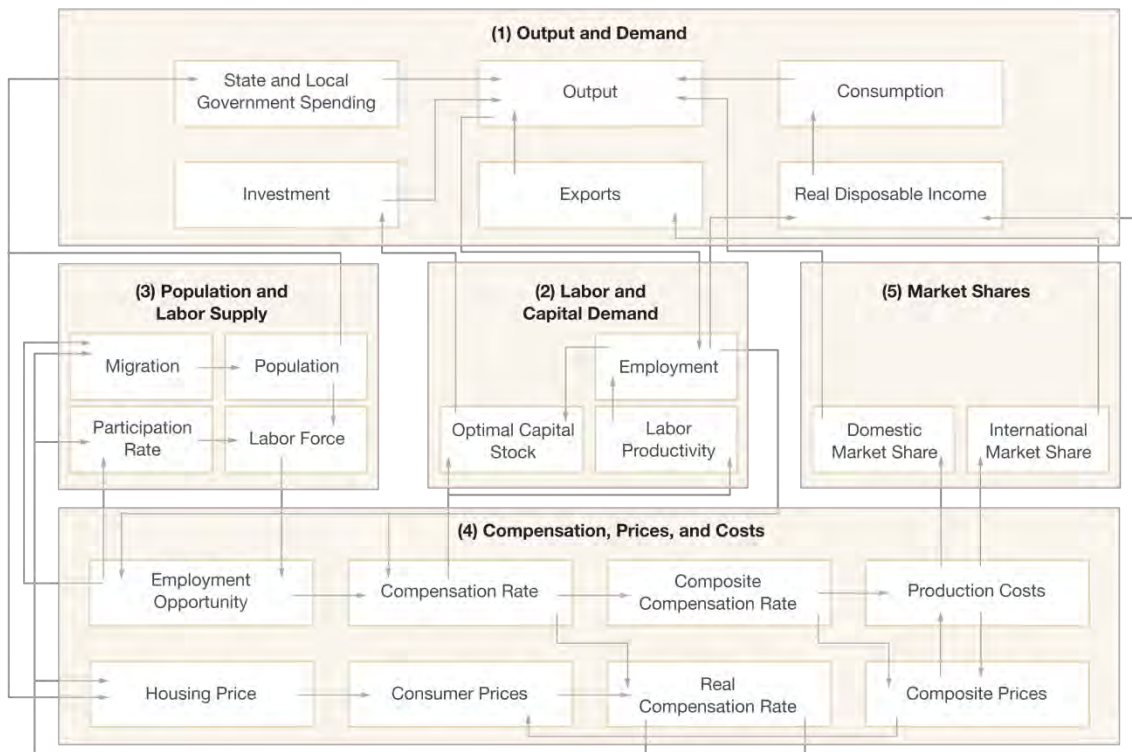
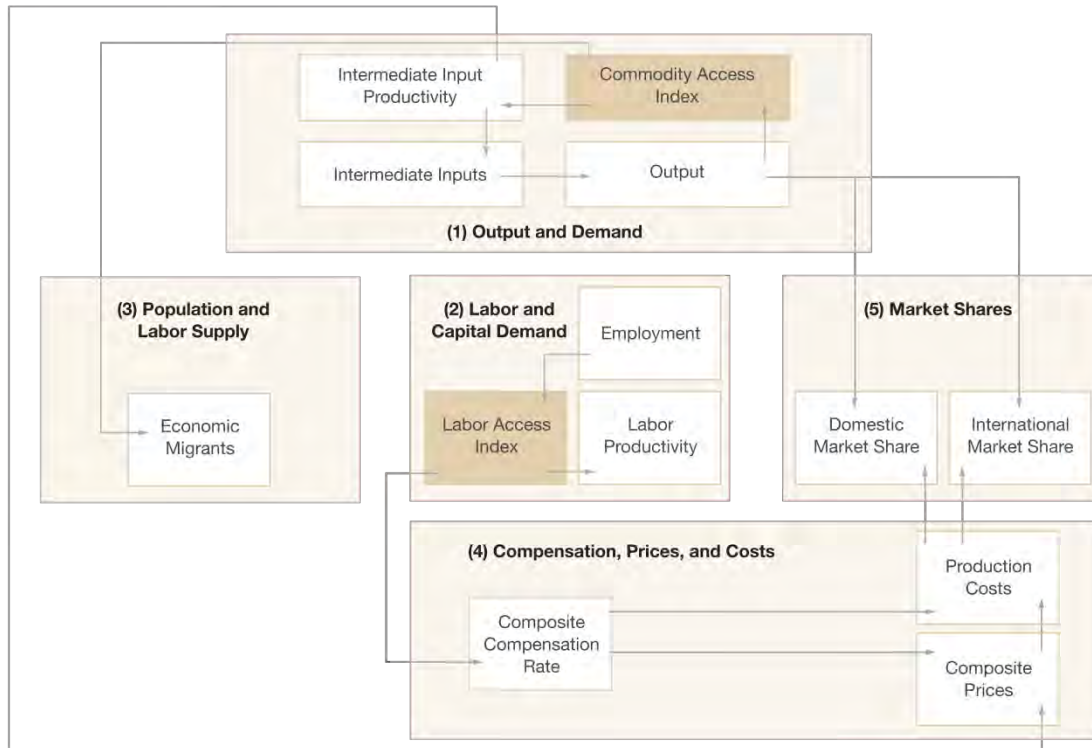


Figure 170: Economic Geography Linkages

Economic Geography Linkages



The Output and Demand block consists of output, demand, consumption, investment, government spending, exports, and imports, as well as feedback from output change due to the change in the productivity of intermediate inputs. The Labor and Capital Demand block includes labor intensity and productivity as well as demand for labor and capital. Labor force participation rate and migration equations are in the Population and Labor Supply block. The Compensation, Prices, and Costs block includes composite prices, determinants of production costs, the consumption price deflator, housing prices, and the compensation equations. The proportion of local, inter-regional, and export markets captured by each region is included in the Market Shares block.

Single-region models consist of an individual region, called the home region. The rest of the nation is also represented in the model. However, since the home region is only a small part of the total nation, the changes in the region do not have an endogenous effect on the variables in the rest of the nation.

Block 1. Output and Demand

This block includes output, demand, consumption, investment, government spending, import, commodity access, and export concepts. Output for each industry in the home region is determined by industry demand in all regions in the nation, the home region's share of each market, and international exports from the region.

For each industry, demand is determined by the amount of output, consumption, investment, and capital demand on that industry. Consumption depends on real disposable income per capita, relative prices, differential income elasticities, and population. Input productivity depends on access to inputs because a larger choice set of inputs means it is more likely that the input with the specific characteristics required for the job will be found. In the capital stock adjustment process, investment occurs to fill the difference between optimal and actual capital stock for residential, non-residential, and equipment investment. Government spending changes are determined by changes in the population.

Block 2. Labor and Capital Demand

The Labor and Capital Demand block includes the determination of labor productivity, labor intensity, and the optimal capital stocks. Industry-specific labor productivity depends on the availability of workers with differentiated skills for the occupations used in each industry. The occupational labor supply and commuting costs determine firms' access to a specialized labor force.

Labor intensity is determined by the cost of labor relative to the other factor inputs, capital and fuel. Demand for capital is driven by the optimal capital stock equation for both non-residential capital and equipment. Optimal capital stock for each industry depends on the relative cost of labor and capital, and the employment weighted by capital use for each industry. Employment in private industries is determined by the value added and employment per unit of value added in each industry.

Block 3. Population and Labor Supply

The Population and Labor Supply block includes detailed demographic information about the region. Population data is given for age, gender, and race, with birth and survival rates for each group. The size and labor force participation rate of each group determines the labor supply. These participation rates respond to changes in employment relative to the potential labor force and to changes in the real after-tax compensation rate. Migration includes retirement, military, international, and economic migration. Economic migration is determined by the relative real after-tax compensation rate, relative employment opportunity, and consumer access to variety.

Block 4. Compensation, Prices and Costs

This block includes delivered prices, production costs, equipment cost, the consumption deflator, consumer prices, the price of housing, and the compensation equation. Economic geography concepts account for the productivity and price effects of access to specialized labor, goods, and services.

These prices measure the price of the industry output, taking into account the access to production locations. This access is important due to the specialization of production that takes place within each industry, and because transportation and transaction costs of distance are significant. Composite prices for each industry are then calculated based on the production costs of supplying regions, the effective distance to these regions, and the index of access to the variety of outputs in the industry relative to the access by other uses of the product.

The cost of production for each industry is determined by the cost of labor, capital, fuel, and intermediate inputs. Labor costs reflect a productivity adjustment to account for access to specialized labor, as well as underlying compensation rates. Capital costs include costs of non-residential structures and equipment, while fuel costs incorporate electricity, natural gas, and residual fuels.

The consumption deflator converts industry prices to prices for consumption commodities. For potential migrants, the consumer price is additionally calculated to include housing prices. Housing prices change from their initial level depending on changes in income and population density.

Compensation changes are due to changes in labor demand and supply conditions and changes in the national compensation rate. Changes in employment opportunities relative to the labor force and occupational demand change determine compensation rates by industry.

Block 5. Market Shares

The market shares equations measure the proportion of local and export markets that are captured by each industry. These depend on relative production costs, the estimated price elasticity of demand, and the effective distance between the home region and each of the other regions. The change in share of a specific area in any region depends on changes in its delivered price and the quantity it produces compared with the same factors for competitors in that market. The share of local and external markets then drives the exports from and imports to the home economy.

Addendum: Report Updates

Since the release of the Part 1A report, Spectrum Gaming Group is providing the following two updates:

On Page 84:

In the penultimate paragraph, Michael Glenn of the Palm Beach Kennel Club requested that his quotation be clarified. We provide the modified paragraph as follows:

“It is a dying sport,” said Michael Glenn, general manager of the Palm Beach Kennel Club, one of the country’s premier greyhound tracks. “There is not enough interest out there. Decoupling (removing the requirement for minimum performances) will help us in the short run but no business can continue to sustain double-digit declines every year. If that continues to occur, at some point in the future, we would have to assess whether we could continue to offer live racing. However, we are committed to offering it in the near future and for as long we can.”

On Page 98:

In the final paragraph, Spectrum reported that it had not received a response from the Florida Lottery regarding the proportion of lottery tickets sold in poor neighborhoods and the proportion of tickets sold to non-Florida residents. The Florida Lottery subsequently provided us with customer demographic data that we believe is worthy of inclusion in the report. We summarize the data as follows:

Like most state lotteries, the Florida Lottery collects player demographic information through tracking surveys. At the request of Spectrum, the Florida Lottery performed an analytical review of data collected through ongoing market research conducted by Ipsos Reid to gain a better understanding of relative spending on lottery products of Floridians by income level.

The Florida Lottery Monthly Online Tracking Surveys collect a total of 1,500 responses each quarter, weighted to conform to Florida’s population demographics in terms of age, gender, ethnicity, and geography. Qualified respondents are drawn from a proprietary online panel and must be at least age 18 and have resided within the state for at least one year. During calendar year 2012, the Ipsos study collected a total of 6,000 responses, which formed the base for the demographic study that produced the following findings.

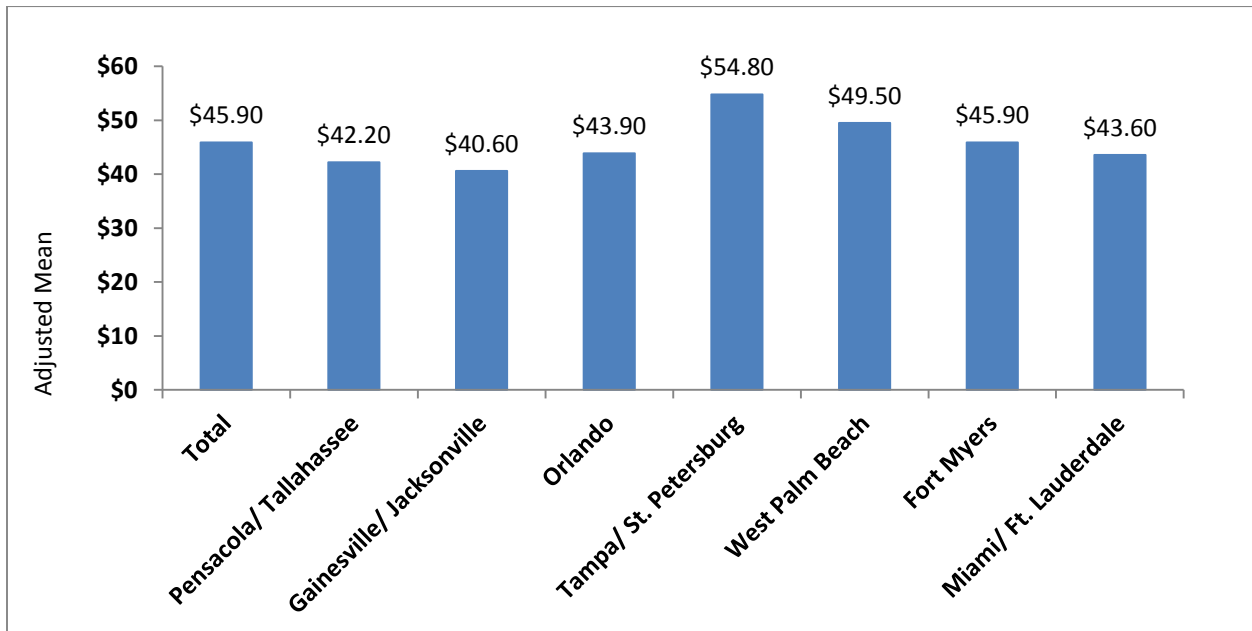
For lottery products as a whole, frequency of play is highest among Floridians in the \$30,000 to \$69,000 annual income level. Average spending on lottery products is highest at the top end of the income scale, \$70,000 and above, and also in the \$30,000 to \$40,000 income range.

The big, multistate lottery games with life-changing jackpots such Powerball are more popular among those in the \$50,000 to \$70,000 income range. In-state Lotto products are most popular among those with incomes in the \$30,000 to \$69,000 range. Conversely, scratch-off games for smaller prizes are more popular in the lower-income brackets (\$20,000 to \$29,000) as well as middle income (\$50,000 to \$69,000).

The highest level of play over the past month on any Florida Lottery game is found among respondents in the \$30,000 to \$69,000 income ranges. The highest average level of spending over the past month on any Florida Lottery game is found among respondents in the over \$70,000 as well as the \$30,000 to \$49,000 income ranges.

From a geographic perspective, the greatest amount of spending, on average, for Florida Lottery products takes place in the Tampa-St. Petersburg and West Palm Beach areas, according to respondents in the Ipsos tracking study.

Patron past-month spending on any Florida Lottery games, 2012



Source: Florida Lottery, Ipsos Reid, Spectrum Gaming Group

PART 1B

I. Introduction

Spectrum Gaming Group (“Spectrum,” “we” or “our”) professionals have been studying the social and economic impacts of gaming since the early 1980s, long before this industry developed a national footprint, and long before it became a significant presence – and a major point of debate – in Florida. Our work since that time has centered on certain core principles that remain universal:

- Winners and losers will be created by the introduction of casinos into a community, as well as by any expansion or changes in the rules. The public and private sectors must maintain realistic expectations, and guide public policy where it can be guided.
- Gaming should never be viewed as a panacea to cure social ills or solve fiscal problems. It is a tool that must be managed through comprehensive legislation and effective regulation.
- The work of policymakers does not end with the development of legislation, or with an agreement on compacts. In a very real sense, the work of the public sector at that point is just beginning.
- Neither the challenges nor the opportunities created by a casino industry stop at municipal or even state boundaries.
- Decisions to expand or introduce any form of gaming will have ramifications that will last for generations, and such decisions are largely irreversible. The very moment that a new facility opens, it creates powerful political forces and new stakeholders who have an interest in the new status quo. That is one reason why gaming often expands, and rarely contracts.

Change is inevitable when legal gambling is introduced or expanded in a state. Some changes are dramatic, such as the construction of a billion-dollar casino resort; some may be profound but not obvious, such as changes in discretionary spending patterns; while others may go undetected, such as embezzlement to feed an addiction.

In this combined report – the second and third of three commissioned by the Florida Legislature – Spectrum assesses potential changes in the state’s gaming industry and their economic effects. The economic effects include examining the social costs of gambling, which – as the reader will see in Chapter V herein – are difficult to estimate and impossible to pinpoint. The social costs, however, are a vital – and often overlooked – consideration for any jurisdiction considering the legalization or expansion of gambling of any kind.

The core of this report is comprised of the Baseline scenario and 12 gaming-expansion scenarios, laid out by the Legislature, almost all of which concern potential change to the casino industry.

Additionally, as subsequently proposed by Spectrum and agreed to by the Legislature, we teamed with the University of Florida to conduct a comprehensive consumer survey of both residents and non-residents regarding their views about gambling and gambling expansion in Florida. This survey was instrumental in completing Chapter III of this report and, we believe, will provide Florida stakeholders with valuable insights for years to come. (See the Appendix V for the complete survey results.)

Florida's deliberations of gaming expansion come at a time when the overwhelming majority of states are considering, or have recently considered, gambling expansion of some type – be it new lottery games, Internet gambling, legalization of casinos, additional casinos, or the introduction of gambling devices in retail locations. Although Florida already has a variety of legal gambling – notably pari-mutuel racing, slot machines at pari-mutuels, Indian casinos and a state lottery – the state is considered by existing and prospective casino operators to be an attractive and underserved market, owing to its large population, attractive demographics and strong tourism industry.

Whether any of the expansion scenarios analyzed herein come to pass remains to be seen, but it is important to understand the impacts of such change. These reports endeavor to help Florida's legislators gain that understanding. However, we caution that the scenarios as outlined offer only the beginning of such an understanding. They must be considered in a broad context, along with a serious consideration of the social, cultural and human aspects regarding any consideration of gaming policy.

Methodology

The State of Florida on April 16, 2013, retained Spectrum Gaming Group (“Spectrum,” “we” or “our”) to complete a two-part study of the state's gambling industry, pursuant to Invitation to Negotiate #859 (“the ITN”).¹ This report is Part 1, Section B: *Assessment of Potential Changes to Florida Gaming Industry and Resulting Economic Effects*

The first report – Part 1, Section A: *Assessment of the Florida Gaming Industry and its Economic Effects* – was delivered on July 1, 2013.

Following is the assigned scope of Part 1, Section B, as published in the ITN:

- A. Assessment of potential changes and economic effects.
 - 1. The analysis shall provide an assessment of possible changes in the gaming industry. Scenarios to be evaluated include:

¹ See http://www.leg.state.fl.us/GamingStudy/docs/ITN_859_Invitation.pdf.

- a. Renewal of the Seminole Tribe's exclusive authorization to conduct banked card games on Indian lands, as defined in the Indian Gaming Regulatory Act.
 - b. Granting the Seminole Tribe exclusive authorization to offer table games on Indian lands, as defined in the Indian Gaming Regulatory Act.
 - c. Regulating, prohibiting, restricting and/or taxing simulated casino-style gambling at Internet sweepstakes cafes, arcade amusement centers or truck stops.
 - d. Modifying or repealing live racing requirements for pari-mutuel facilities, including evaluation of impacts on purses and awards: Thoroughbred racing, harness racing, quarter horse racing, greyhound racing, jai alai.
 - e. Changing tax rates for Class III games at pari-mutuel facilities.
 - f. Adjusting restrictions on the number and operation of slot machines at pari-mutuel facilities in Miami-Dade and Broward counties.
 - g. Authorizing pari-mutuel facilities in counties other than Miami-Dade and Broward to offer slot machines.
 - h. Authorizing pari-mutuel facilities to conduct table games or other Class III games.
 - i. Authorizing a limited number of casino/resort complexes in Miami-Dade and/or Broward counties.
 - j. Authorizing a limited number of casino/resort complexes around the State.
2. For each scenario, other than exclusive authorization for the Seminole Tribe to offer Class III games on Indian lands, as defined in the Indian Gaming Regulatory Act:
 - a. The fiscal analyses shall address suitable numbers and locations of gaming facilities so as to maximize net new economic activity and avoid cannibalization of existing sectors.
 - b. The fiscal analyses should evaluate each of three alternative tax regimes:
 - i. One in which all non-lottery gaming activities are taxed at rates corresponding to current pari-mutuel tax rates;
 - ii. One in which all non-lottery gaming activities are taxed at national average rates for their respective subsectors; and
 - iii. One in which all non-lottery gaming activities are taxed at a rate that would maximize state revenues.
 - c. The fiscal analyses should evaluate economies of leveraging equity and profits as sources for public funding of education, transportation, underwriting risks associated with a catastrophic hurricane event in Florida, and other public funding needs.
 3. So the Legislature might best understand not only the fiscal impact estimates but also sources of variation, for each scenario, the analysis shall describe:
 - a. Inputs to the study's fiscal impact models;
 - b. Calculations the model uses to estimate fiscal impacts;
 - c. Calculations the model uses to account for cannibalization against other sectors of the economy, including other potential expansions of gaming.
 4. For each scenario, the analysis should include estimates of total spending and net (recognizing reduced spending at other Florida businesses because visitor and resident spending has now flowed to gaming activities) economic impact for gaming as well as the change in demand associated with each of several sources including:
 - a. The current visitors who would have come to Florida in the absence of expanded gaming activities but would choose to spend more during their visit, or extend the length of their visit, if additional casino gaming were available;
 - b. Floridians who now gamble out of state or in Native American casinos who would instead opt to gamble in Florida, if additional local gaming activities were available;

- c. Floridians who now do not gamble but would participate if additional gaming activities were easily available;
 - d. Visitors who plan a visit to Florida rather than an alternative destination due to the availability of gaming here;
 - e. Visitors who would choose not to visit Florida due to the presence of gaming activities.
5. For each scenario, the analysis shall provide an assessment of the likely social costs of expanded gaming activities, including problem and pathological gaming-related behaviors and changes in crime rates. The assessment shall compare and contrast credible existing studies of social costs of gaming and provide social cost scenarios to match the preceding economic and fiscal analyses.
 6. For each scenario, the analysis shall evaluate whether and how estimates would change if implemented in combination with other scenarios.

Our task was to study the impacts of legalized gambling. Like many other states, Florida had (and probably still has) illegal and/or unregulated gaming in the form of Internet cafes and slot-like arcade games. We discuss the consequences of the assumed shutdown of illegal gambling but do not otherwise factor illegal gambling in our other economic impacts.

Spectrum employed 17 project professionals for this combined report, all of whom are staff experts or associates, assisted by support staff as needed. Our team included: Dr. Lori Pennington-Gray, Director of the Tourism Crisis Management Institute at the University of Florida; Dr. Howard Shaffer, Director, and Dr. Debi LaPlante, Director of Research and Academic Affairs, from the Division on Addictions at The Cambridge Health Alliance, a Harvard Medical School teaching affiliate; and Dr. Douglas Walker, Professor of Economics at the College of Charleston and author of *Casinonomics: The Socioeconomic Impacts of the Casino Industry* and numerous other gambling industry-related publications. The Spectrum team relied on publicly available data, as well as data requested from gambling operators and government sources, interviews with various Florida stakeholders (in person, by telephone and by email), existing documents and research reports, and our collective expertise in having studied gambling for more than three decades.

As we did with the Part 1, Section A, report, we teamed with Regional Economic Models Inc., a globally respected economic modeling firm based in Amherst, MA, that works with numerous state governments, including the State of Florida. REMI's goal in this report was to use the information developed by the other team members to estimate the economic impacts of the various gaming scenarios developed by the State. REMI relied on its expertise to prepare the data for input into its Tax-PI model.

II. Assumptions, Methodologies and Considerations

Spectrum developed numerous assumptions, based on our experience and in consultation with Legislative staff, that are the foundation for the analyses throughout this report. It is critical that stakeholders understand these assumptions and the methodologies used in developing the results. We provide and discuss these below.

We further consider the impacts of certain situations that would be subject to a wide variety of assumptions or interpretations and as such we have not quantified/projected.

Current Casino Landscape

As of June 30, 2013, (the last day of the fiscal year ["FY 2013"]) we estimate there were 20,973 slot machines and 344 table games (and 23,037 gaming positions) at the 14 casinos throughout Florida.² Of the total gaming positions, 6,409 slot machines (27.8 percent of the state's gaming positions) were at the six existing pari-mutuels in Broward and Miami-Dade counties, while 16,628 gaming positions (72.2 percent of state total) were at the eight Native American casinos. Six of the 67 counties had at least one casino, while Broward and Miami-Dade counties had 67.1 percent of the state's gaming positions and Hillsborough County had 24.8 percent of the total.

In FY 2013, the six pari-mutuels with slots had \$501.3 million of gross slot revenue, with net slot revenue of \$435.8 million, resulting in revenue due to the State of \$152.5 million (i.e., 35 percent of net slot revenue). We estimate the eight Native American casinos had \$2.07 billion of combined slot and table games revenue during this period.³ Therefore, we estimate GGR from Florida's 14 casinos was \$2.57 billion.

Once both Hialeah Park and Dania Jai-Alai are operational with an assumed 1,000 slot machines apiece, we estimate there will be 22,973 slot machines and 344 table games (and 25,037 gaming positions) at 16 casinos statewide. Assuming existing casinos do not add or subtract gaming positions from their counts as of June 30, 2013, there would be 8,409 slot machines (33.6 percent of the state total) at eight pari-mutuels in Broward and Miami-Dade counties, while the balance of statewide gaming positions (66.4 percent) would be at the eight Native American casinos. Collectively, Broward and Miami-Dade counties would have 69.7 percent of the total statewide gaming positions and Hillsborough County would have 22.9 percent of the total. There would be six counties in Florida with one or more casinos.

² These figures, as well as all other references to table games and/or gaming positions throughout this report, do not include poker tables and/or cardroom operations (unless specifically noted otherwise). One gaming position = one slot machine or one seat at a gaming table (we assume six seats per gaming table).

³ Estimated average GGR per gaming position per day of \$341, applicable to all gaming positions at all Native American casinos in Florida.

Importantly, this understanding and recognition of the current casino landscape provides the foundation for all of our modeling, and resultant GGR projections in this report.

Projecting GGR, Methodologies Employed

Demand for gaming in South Florida comes from multiple sources. Based on information and belief, the local population currently accounts for the vast majority of GGR (and visitation) to Florida's casinos.

The principal tool Spectrum uses in projecting GGR, under all scenarios, is our gravity model. The gravity model is an industry-standard forecasting technique that uses the actual adult population totals around a specified casino, taking into account competing locations from within a predefined catchment area (quantified by reasonable drive times, expressed in minutes, surrounding each casino – not actual driving or straight-line miles) to project visitation and, ultimately, GGR from the projected visitation. Simply, the farther away an adult resides from a casino (and/or respective casinos throughout Florida and/or in nearby states), the lower the probability that that person will make a trip to gamble there. If given an opportunity, adults with propensity to gamble will tend to choose to patronize the closest casino to their homes, particularly if the gaming product is similar amongst competing casinos. In addition to adult population totals surrounding the specified location, among other variables, the gravity model employed also considers casino participation rates, GGR per adult, and has the ability to adjust each location for the relative attractiveness of the gaming options/facilities when two or more viable gaming options/facilities are available to the population sets (i.e., adjust for number and/or offering of slots, table games, etc.).

Spectrum built a comprehensive, constrained gravity model. We incorporated estimated population data for 2013 covering 3,060 areas in Florida, Alabama, Georgia, Louisiana and Mississippi that were approximated by ZIP Code, including all areas within a four-hour drive of an existing or potential Florida casino. The data included population data (both total and estimated for gaming-age adults – age 21 and over) and median household income by ZIP Code (to adjust relative estimated GGR budgets accordingly).

Our estimated population and median household income data was obtained from Nielsen SiteReports and is principally based on US Census Bureau data. Nielsen SiteReports indicates this data is further refined at the ZIP Code level based on sources including trends in US Postal Service deliverable address counts, counts from the Nielsen Master Address File, and Valassis counts of new housing units.

Our gravity model accounts for all 15 existing casinos in Florida, in addition to provisions for up to 27 other potential casinos throughout the state (dependent on scenario). We further assume these aforementioned 42 locations are the only valid locations for gaming facilities throughout Florida and in further determining “suitable numbers and locations of gaming facilities so as to maximize net new economic activity and avoid cannibalization of existing sectors” (per the Legislature's stated goal). Additionally, we include casinos (and/or

markets with casinos) in nearby states where four-hour drive-time boundaries may overlap with such boundary emanating from the Florida border (i.e., to quantify shared visitation), such as New Orleans, Baton Rouge, the Mississippi Gulf Coast, Harrah's Cherokee in North Carolina, etc.

With regard to annual GGR per adult, the basis for the material assumptions is from extensive experience and working knowledge in many domestic gaming markets by Spectrum professionals assigned to this project, and supported by public data presented within this report (where applicable). The material assumptions (aside from adult population by ZIP Code and relative distance calculations, gravity effect) are:

- Gaming age of 21+ (i.e., the adult population).
- Drive-in adults, or local market gamers:
 - Four-hour drive boundary surrounding each destination resort.
 - Two-hour drive boundary surrounding the two Seminole Hard Rock casinos (Tampa and Hollywood).
 - One-hour drive boundary surrounding all other casinos in Florida
- Casino participation rates up to 40 percent of adult population by ZIP Code:
 - Adult population within a five-minute drive-time to any casino has an estimated casino participation rate of 40 percent.
 - Adult population beyond a five-minute drive-time to any casino has an estimated casino participation rate at or below 40 percent (while this rate decreases for the adult population, according to ZIP Code, as distance from a casino increases).
- Specific to destination resorts, as well as casinos with integrated hotels:
 - Annual hotel occupancy of 90 percent.
 - Annual GGR projections for hotel guests and tourists (the combined segments) is based on an assumed average GGR per occupied hotel room of \$206.
 - This figure was determined based on fiscal year ended 2012 estimated GGR-per-occupied-room estimates from largest Las Vegas Strip resorts (the 23 locations having at least \$72 million in GGR annually).
 - We deem this methodology as reasonable in quantifying expected levels of GGR that destination resorts could generate from non-local market visitation. For example, according to the most recent Las Vegas Visitor Profile Study, for the years 2008-2012, the percentage of visitors to Las Vegas staying overnight was in excess of 99 percent.

We believe the vast majority of GGR to these Las Vegas Strip properties was from out-of-state residents (i.e., hotel guests and tourists), while the Las Vegas Visitor Profile Study excludes residents of Clark County (where Las Vegas is located) from its results. For FY 2012, average GGR per occupied room night was \$206.

- To quantify applicable non-gaming revenue and/or other related operating metrics applicable to Florida destination resorts, we will benchmark from the Nevada Gaming Abstract 2012. As an example:
 - Average room rate per day of \$144
 - Average food and beverage sales per day of \$133 per occupied room
 - Average other revenue of \$89 per occupied room

To determine “suitable numbers and locations of gaming facilities so as to maximize net new economic activity and avoid cannibalization of existing sectors,” we assume all existing casino operations in Florida will remain at current size (i.e., no change in number of gaming positions). However, we will determine the suitable numbers and locations of gaming facilities for any other locations of gaming facilities in Florida based on a benchmark performance figure of \$200 in average win per gaming position per day and further assume that a location warranting less than 500 gaming positions (per our modeling/methodologies) will not be economically viable and, as such, will not materialize.

1. Casino Participation Rate

According to the American Gaming Association’s 2013 *State of the States* survey, 34 percent of the US adult population visited a casino during 2012, while 32 percent of the US adult population gambled during a casino visit (i.e., of all US adults visiting a casino, ±5 percent did not gamble).

We estimate that the current casino participation rate for Florida adults patronizing a Florida casino is 23.1 percent. Furthermore, our modeling indicates the following casino participation rates (by distance from a casino):

- 38.2 percent for all Florida adults residing with a 30-minute drive of an existing Florida casino, and 15.5 percent for the remainder of Florida adults.
- 32 percent for all Florida adults residing with a one-hour drive of an existing Florida casino, and 11.8 percent for the remainder of Florida adults.
- 26.4 percent for all Florida adults residing with a two-hour drive of an existing Florida casino, and 8.6 percent for the remainder of Florida adults.

Furthermore, according to the *Harrah's Survey, Profile of the American Casino Gambler*,⁴ of the top 20 largest feeder markets to US casinos, three were in Florida: Miami-Fort Lauderdale, Tampa-St. Petersburg-Sarasota, and Orlando-Daytona Beach-Melbourne. These three areas in Florida were aggregated according to Designated Market Areas (“DMA”) and included 22 of Florida’s 67 counties, and two-thirds of Florida’s population. Based on the data compiled, the casino participation rate in Florida for these three DMAs, and aggregated, was 23.1 percent in 2005 – before the introduction of racetrack casinos in South Florida.

We believe that this rate has grown since the 2006 *Harrah's Survey* was conducted due to continuing expansion of casinos in Florida, as well as the proliferation of casinos nationwide. We believe the casino participation rate for adults that live nearby to a casino, or casinos, may reasonably approach 40 percent, annually. Therefore, in our modeling we assume a casino participation rate up to 40 percent by ZIP Code (albeit adjusted downward by gravity effect as the relative distance to a casino increases).

2. Annual GGR per Casino Gambler

Our estimate for annual GGR per casino gambler in our gravity model, and as applied to Florida (at current level, i.e., 2013), was based on operating results for FY 2013 for all Florida pari-mutuel slot operations and estimated operating results for Florida Native American casinos based on data received from the Seminole Tribe along with recent GGR estimates/projections (as contained in our earlier report).

Our modeling indicates an annual GGR per casino gambler of \$866 among Florida adults. We believe this value is a reasonable estimate, as compared to the average derived US value in recent years. Per data assembled by Spectrum from various state and federal agencies, as well as the American Gaming Association, we have assembled nationwide casino GGR, as well as participants, over the most recent five-year period available:

Figure 1: US casino GGR, visitation and annual GGR per casino gambler (2008-12)

Year	GGR (\$B)			Casino Gamblers (millions)	Participation Rate	GGR / Gamer
	Commercial	Native American	Total			
2008	\$36.2	\$26.7	\$62.9	54.6	25.0%	\$1,152
2009	\$34.3	\$26.5	\$60.8	61.7	28.0%	\$985
2010	\$34.6	\$26.5	\$61.1	54.8	25.0%	\$1,115
2011	\$35.6	\$27.2	\$62.8	59.7	27.1%	\$1,053
2012	\$37.3	\$27.9	\$65.2	71.6	32.0%	\$911
5-Year Avg.	\$35.6	\$27.0	\$62.6	60.5	27.6%	\$1,035

Source: American Gaming Association, National Indian Gaming Commission, various state agencies

As illustrated, over the last five years nationwide, commercial and Native American casino GGR averaged over \$62 million annually, while there were an average of 60.5 million

⁴ The 2006 *Harrah's Survey* was the last report detailing these participation rates by market and, to our knowledge, is the most recently publicly available report addressing such.

casino gamblers (casino participation) annually. This yields an average GGR per gamer of \$1,035 over the five-year period.

Our derived GGR per Florida casino gambler of \$866 is 84 percent of the national average result between 2008 and 2012. The difference may reflect GGR leakage to other jurisdictions that are beyond the boundaries utilized in our modeling (such as GGR from Floridians destined for the Mississippi Gulf Coast, Louisiana, Las Vegas, Atlantic City or elsewhere). Or the value may be suppressed due to the types and availability of casino offerings currently existing in Florida and/or in nearby states; that is, many casinos throughout Florida and in nearby states are not destination resorts and may have limited gaming and non-gaming offerings, thus relying extensively on lower-spending day-trip players.

The 2006 *Harrah's Survey* estimated the average number of visits annually to a casino was 6.1. Spectrum has no reason to believe that this figure would have declined since then, given the continued proliferation of casino gaming throughout the United States. Additionally, per a report that Spectrum prepared for the State of Connecticut in 2009, a comprehensive survey of 1,427 Connecticut residents found that the average number of casino visits per resident exceeded 12 annually at a time when every Connecticut adult resided within a two-hour drive of a casino and 40 percent resided within a one-hour drive.⁵

Therefore, we believe that our assumption of GGR per casino gambler (and by establishing reasonableness to number of casino visits that correspond to this value) is reasonable.

3. Accounting for Florida's Snowbird Population

With respect to Florida's snowbird population, it is our understanding that a significant amount of this population may be accounted for within US Census Bureau data (for Florida), and thus is captured within our modeling (and GGR projections) – as it is our understanding that US Census Bureau counts reflect a person's "usual residence" as of April 1, meaning the place where they live and sleep most of the time (although there are questions/efforts in place to add clarity to place of permanent residence).

In the context of our GGR projections, the following illustrative example shows an estimate of potential GGR from the snowbird population under the following assumptions:

- 1 million adult snowbirds in Florida annually
- One-half of Florida's adult snowbirds already accounted for in US Census data (as Florida residents)
- Average of six months spent in Florida

⁵ Spectrum Gaming Group, "Gambling in Connecticut: Analyzing the Social and Economic Impacts," June 22, 2009; http://www.spectrumgaming.com/dl/june_24_2009_spectrum_final_final_report_to_the_state_of_connecticut.pdf

- Casino participation rate of 25 percent to 30 percent (a range consistent with US historical data)
- Average GGR per gamer of \$1,035 annually (consistent with US historical data, while we apply one-half of this value to Florida casinos to mirror average time spent in Florida)

Under this methodology, the Florida snowbird population (and assumed non-residents of Florida) has annual GGR potential of \$64.7 million to \$77.6 million (for Florida casinos). Under all gaming expansion scenarios presented in this report, the GGR contribution from the Florida snowbird population is less than 2.9 percent of total GGR. However, under all gaming expansion scenarios presented, we assume a minimum of 5 percent of GGR is from non-residents of Florida (therefore, we believe we have sufficiently accounted for the Florida snowbird population within our projections).

4. Disclaimer

It should be noted that despite our drive-in (or local) market GGR projections resulting from our gravity modeling exercise, actual market and property performance can be subject to industry internal and external factors. From an internal industry perspective, competitive marketing and operational strategies, targeted and timely capital reinvestment, and customer perceptions all influence potential performance. From an external point of view, competition for patron discretionary income from other leisure and recreational activities and the general state of the economy may influence spending habits of gaming patrons. In essence, our GGR projections herein are illustrative and may be influenced by a variety of factors (aside from gravity modeling, or quantification of adults by drive-time calculations alone).

Minimizing Cannibalization of GGR to Existing Casinos

One of the State's goals in this exercise may be to maximize net new economic activity; our salient assumption is that this would be achieved through maximization of GGR together with minimal cannibalization to existing Florida casino operators. Under certain scenarios (as indicated), we employ mechanisms in our modeling to minimize cannibalization to existing casinos.

Of the 20 pari-mutuels outside of Miami-Dade and Broward counties, seven are within a one-hour drive of an existing Florida casino. Under scenarios where these locations could offer a casino we believe it would be nearly impossible to avoid some level of cannibalization of GGR (from visitation within a shared one-hour drive-time boundary, or boundaries). Specifically, of the seven pari-mutuels within a one-hour drive of an existing Florida casino, four are within a one-hour drive of Seminole Hard Rock in Tampa (Derby Lane in Pinellas County, Sarasota Kennel Club in Sarasota County, and Tampa Bay Downs and Tampa Greyhound Track in Hillsborough County). The other three pari-mutuels within a one-hour drive of an existing Florida casino would primarily impact Seminole casinos, as well as all other pari-mutuel casinos

in Broward County (Fort Pierce Jai-Alai in St. Lucie County, Naples Fort Myers Greyhound Track in Lee County, and Palm Beach Kennel Club in Palm Beach County).

To project and yield maximum GGR for Florida, while minimizing cannibalization to existing operators, we assumed the seven pari-mutuels outside of Miami-Dade and Broward counties and within a one-hour drive of an existing casino could have no more than 500 slot machines and/or no more than 15 table games, dependent on expansion scenario (i.e., an illustrative method of applying geographic protection for existing operators).

Projecting Employment

We project new and/or incremental direct employment under any gaming expansion scenario (exclusive of destination resorts) as follows:

- 0.4 employees per slot machine
- 5.0 employees per table game
- 0.15 employees per total gaming position

Under this methodology, and as an example, a casino having 1,000 slots and 30 table games would have 727 employees (i.e., 1,000 slots at 0.4 employees plus 30 table games at 5.0 employees, plus 1,180 gaming positions at 0.15 employees).

We project new direct employment under any gaming expansion scenario for destination resorts only as follows:

- Casino-related: 1.0 employees per every \$250,000 of GGR
- Hotel-related: 1.0 employees per every \$200,000 of hotel-related revenue
- Food and Beverage-related: 1.0 employees per every \$122,500 of food and beverage-related revenue
- All other: 1.0 employees per every \$650,000 in total revenue

These ratios (applied to destination resorts) were derived by us from the Nevada Gaming Abstract for fiscal year ended June 2012 – and further based on data for all reporting properties on the Las Vegas Strip with \$72+ million in annual gaming revenue.

We further assume that each direct employee translates into 0.85 full-time-equivalent employees (“FTEs”).

Pari-mutuel Casinos

Per the current and applicable Florida statute, we assume each slot machine licensee is limited to 2,000 slot machines per location. Consistent with slot operations at pari-mutuels in Broward and Miami-Dade counties (inclusive of slot operations at Dania Jai-Alai), we assume

any additional racinos throughout the state will operate under the same existing rules and regulations.

For any expansion of racinos outside of Broward and Miami-Dade counties we assume that slot and/or table games operations would be limited to existing operators with pari-mutuel licenses and will occur at the current physical address for each pari-mutuel location. In our modeling we provide for 20 operators with pari-mutuel licenses (outside of Broward and Miami-Dade counties) that are located in 18 different counties, as summarized below:

Figure 2: Florida's non-gaming pari-mutuel licenses

<u>Property</u>	<u>City</u>	<u>County</u>
Melbourne Greyhound Park, LLC	Melbourne	Brevard
Orange Park Kennel Club, Inc.	Jacksonville	Clay
Jacksonville Greyhound Racing, Inc.	Jacksonville	Duval
Pensacola Greyhound Racing, LLP	Pensacola	Escambia
Gretna Racing, LLC	Gretna	Gadsden
Hamilton Downs Jai Alai and Poker	Jasper	Hamilton
Tampa Bay Downs, Inc.	Tampa	Hillsborough
Tampa Greyhound Track	Tampa	Hillsborough
Jefferson County Kennel Club, Inc.	Monticello	Jefferson
Naples Fort Myers Greyhound Track	Bonita Springs	Lee
Ocala Poker & Jai-Alai	Orange Lake	Marion
Palm Beach Kennel Club Poker Room	West Palm Beach	Palm Beach
Derby Lane	St. Petersburg	Pinellas
Sarasota Kennel Club, Inc.	Sarasota	Sarasota
Orlando Jai-Alai & Race Book	Casselberry	Seminole
Sanford-Orlando Kennel Club	Longwood	Seminole
St. Johns Greyhound Park (Bayard Raceways, Inc.)	Jacksonville	St. Johns
Fort Pierce Jai-Alai	Fort Pierce	St. Lucie
Daytona Beach Kennel Club, Inc.	Daytona Beach	Volusia
Ebro Greyhound Park	Ebro	Washington

Source: Florida Department of Business and Professional Regulation, Division of Pari-Mutuel Wagering.

We note that operators with pari-mutuel licenses for Tampa Greyhound Track, St. John's Greyhound Park (Bayard Raceways Inc.) and Jacksonville currently lease out their greyhound racing dates to other locations (i.e., Tampa Greyhound Track leases its dates to Derby Lane; St. John's and Jacksonville run their dates at Orange Park), while there is no live racing occurring at these three facilities. Additionally, Jefferson County Kennel Club no longer offers live racing, although it has applied for racing dates that would begin in March 2014. That leaves 16 locations where live pari-mutuel events are occurring; however, our salient assumption is that all 20 operators with pari-mutuel licenses would seek to operate slot machines.

1. Annual License Fee and Regulatory Fee

Per our understanding, under current law/current administration, slot machine licensees pay an annual license fee of \$2 million and a regulatory fee of \$250,000.

We assume the opening and consequent operation of slots at both Hialeah Park and Dania Jai-Alai would lead to additional, annually recurring license fees of \$4 million and regulatory fees of \$500,000.

2. Assessment of Expansion Impact on Regulatory Costs

Florida's gaming and pari-mutuel regulatory costs are paid by the industry, as they typically are in commercial-gaming states. Therefore, the impacts to the State are captured endogenously in the REMI Tax-PI model.

Information related to Division of Pari-Mutuel Wagering's expenditures and revenues appear each year in its annual fiscal report. Gaming taxes, fees and fines are all deposited into the Special Revenue Fund. Expenditures are also reported; they include PMW salaries, lab services, and efforts to prevent compulsive gambling. The fund collects the taxes paid by the racetracks on slot machines but then transfers the money to a trust fund in the Department of Education. In FY 2012, Education received \$144.2 million.

Spectrum's review of those annual reports shows that the fund balance for the Special Revenue Fund stood at \$7.2 million in FY 2012.⁶ The fund carries over its balance from year to year and absorbs deficits if it must. The fund balance has fallen in recent years. In FY 2003, it was \$17.9 million.⁷

We note that the fund balance would be much higher if it were not for transfers made to the General Revenue Fund, or the State Treasury. In FY 2012, for example, \$22 million was transferred to general revenue. Some \$19 million of the \$22 million was transferred due to a state law that requires that any "unappropriated funds" in excess of \$1.5 million to be turned over to the state Treasury.⁸ In other words, after all expenses are paid, almost all surplus funds have to be transferred to the State or general revenue. Since FY 2007, those transfers totaled \$132.9 million. On top of that, another \$18 million was transferred to the general fund as part of a service charge the state levies against the fund, putting the total amount transferred from the Special Revenue Fund to more than \$150 million since FY 2007.⁹

The fund has sustained deficits in three of the last four years. The deficit in FY 2012 was \$264,000.

In most other gaming states, the gaming industry is directly billed for regulatory costs. So far, the fees and taxes collected from the gaming industry in Florida have been more than enough to cover the regulatory budget of PMW. The agency's operating budget for FY 2012 was \$11.5 million.¹⁰

⁶ FY 2012 PMW Annual Report, p. 34

⁷ Spectrum review of PMW annual reports

⁸ Section 550.135, Fla. Stat.

⁹ Spectrum review of PMW annual reports

¹⁰ FY 2012 PMW Annual Report, p. 37

While the fund is large enough to absorb relatively small deficits, it is difficult to say what the future holds. It appears that the revenue currently generated is clearly enough to pay for PMW's operating budget. If the Special Revenue Fund balance should fall too low, the Legislature could cut back on its general revenue transfers, or as an alternative, PMW would have to reduce expenses if the Legislature wanted to ensure that taxpayers do not have to pay for regulatory gaming costs.

Should the State expand gaming, Spectrum assumes that the assessments on the industry will continue to be sufficient to fund the cost of regulating the pari-mutuel and gaming industries, as is common practice in other commercial-gaming states.

3. Consideration of Gaming-Expansion Impacts on Pari-Mutuel Cardrooms

Spectrum recognizes that existing pari-mutuel operators may be concerned about the impact of slots and/or table games on existing cardroom revenue streams (or gross receipts) – stemming from an expanded casino landscape in Florida that could include casinos at pari-mutuels and/or destination resorts. Absent any specific locations or business models for new casinos (or pari-mutuels that may expand to include slots and/or table games) it would be impossible to quantify what impacts such expansions may have on specific pari-mutuels, but the concerns of such operators warrant a detailed discussion of such issues.

As such, and unless otherwise noted, our GGR and related projections concerning the 12 gaming-expansion scenarios in this report do not incorporate any material increases or decreases in cardroom revenue and/or operations throughout Florida. However, we do provide the following commentary and examples related to potential impact of gaming-expansion on existing pari-mutuel cardrooms.

a. Potential Impact of Slots and/or Table Games on Pari-Mutuel Cardrooms

The following table shows Florida cardroom gross receipts (or revenue) for the fiscal years 2006 through 2013 for each of the racinos with slots (as of end of FY 2013), as well as collectively for racino and non-racino locations. Bear in mind, none of the six racinos had slots during FY 2006.¹¹

¹¹ Excludes Hialeah Park as a racino.

Figure 3: Florida cardroom receipts, 2006-2013

Racino / Segment (Cardroom Gross Receipts, in \$M)	Month- Year Opened	2006	2007	2008	2009	2010	2011	2012	2013
Gulfstream Park	Nov-06	\$0.5	\$0.2	\$0.8	\$0.9	\$0.9	\$0.5	\$2.3	\$4.6
Mardi Gras	Dec-06	\$0.6	\$1.4	\$4.3	\$4.0	\$5.2	\$7.1	\$7.1	\$7.6
Pompano Park	Apr-07	\$0.1	\$0.0	\$0.0	\$0.0	\$1.2	\$4.2	\$4.4	\$4.0
Magic City	Oct-09	\$0.0	\$1.1	\$3.8	\$3.9	\$3.9	\$5.3	\$5.1	\$5.1
Calder	Jan-10	\$0.8	\$2.1	\$1.2	\$3.1	\$3.5	\$4.6	\$5.0	\$5.1
Casino Miami	Jan-12	<u>\$1.5</u>	<u>\$2.0</u>	<u>\$10.3</u>	<u>\$9.9</u>	<u>\$10.3</u>	<u>\$13.1</u>	<u>\$13.5</u>	<u>\$12.8</u>
Racino Total:		\$3.0	\$6.6	\$19.7	\$21.0	\$24.1	\$34.3	\$35.2	\$34.6
Non-Racino Total:		<u>\$41.4</u>	<u>\$47.6</u>	<u>\$71.1</u>	<u>\$80.7</u>	<u>\$80.7</u>	<u>\$90.8</u>	<u>\$96.2</u>	<u>\$98.1</u>
Grand Total:		<u>\$44.4</u>	<u>\$54.2</u>	<u>\$90.9</u>	<u>\$101.7</u>	<u>\$104.8</u>	<u>\$125.1</u>	<u>\$131.5</u>	<u>\$132.7</u>
FL % of Cardroom Rev. from Racinos		6.8%	12.2%	21.7%	20.7%	23.0%	27.4%	26.8%	26.1%
FL % of Cardroom Rev. from Non-Racinos		93.2%	87.8%	78.3%	79.3%	77.0%	72.6%	73.2%	73.9%

Source: Florida Division of Pari-mutuel Wagering

Of the six racino locations, and collectively, cardroom revenue was 11.5 times greater in FY 2013 (with slots) than it was in FY 2006 (before slots). Each of the Florida racinos has experienced significant increases in cardroom revenue in periods with slots, as compared to the last fiscal year without slots. Moreover, in FY 2006 the six racino locations (absent slots at their facilities) combined for 6.8 percent of statewide cardroom revenue; however, in FY 2013 these same six racinos accounted for 26.1 percent of statewide cardroom revenue.

Additionally, even with six of the pari-mutuel locations adding thousands of slots and becoming racinos (as well as with the Seminole Tribe's casinos expanding casino offerings) over this eight-year period, cardroom revenue at non-racino locations has increased significantly – by 2.4 times (from \$41.4 million in FY 2006 to \$98.1 million in FY 2013).

Our views on these results, and from our experience, are summarized here:

- The demographics of cardroom (or poker) players differ significantly from the mass-market casino player. In properties where we have worked, and at others we have observed, there is little crossover between such groups.
- While most poker players do not cross over to other casino games, they may travel with spouses or other adults who do play casino games, and might be expected to spend money in non-gaming areas, such as hotels, dining and entertainment. The opposite phenomena also holds true, where casino-centric (or slots and/or table games) customers may travel with spouses or other adults who do play poker – and this can serve to increase cardroom revenue.
- Pari-mutuel locations with cardrooms that do expand to offer slots and/or table games (and/or other non-gaming amenities), by definition, would be expending capital and expanding their facilities/offerings, which could create myriad synergies that ultimately induces cardroom demand (i.e., creates new visitation and play).

While it cannot be guaranteed that an expanded casino landscape in Florida would create a positive outcome on cardroom revenue for each and every pari-mutuel operator statewide, we do point to our experience, as well as to the empirical data from Florida's racinos, which indicates that expanded offerings (specifically adding slots to pari-mutuel operations) has not negatively impacted cardroom revenue.

b. Potential Impact of Destination Resorts on Pari-Mutuel Cardrooms

Spectrum recognizes that the majority of pari-mutuels in Florida – all those located outside Broward and Miami-Dade counties – rely on pari-mutuel and poker revenue, and as such they are concerned about the potential impacts of destination resorts in Florida.

If destination casino resorts were built and allowed to operate cardrooms, they may compete against the cardrooms at pari-mutuels – whether the pari-mutuels have slots and tables or not. While the destination resorts may present a competitive threat to the pari-mutuel cardrooms, they may also grow the market by attracting poker players from farther away or those who are currently not attracted to existing cardrooms at existing pari-mutuel locations.

In any event, were the State to allow destination resorts, it would have the option of prohibiting poker operations in them. From our experience, poker operations (or cardrooms) generally comprise a very small percentage of total gaming revenues for casinos, while poker operations are typically a low-margin operation; therefore, we cannot imagine that the inability to offer a poker room would impact prospective bids to develop a destination gaming resort.¹²

Our views are summarized here:

- In our experience, the demographics of both pari-mutuel and poker players differ significantly from the mass-market casino player. In properties where we have worked, and at others we have observed, there is little cross-over between such groups.
- While that may bode well for pari-mutuel operators, we also recognize that both destination resorts and tribal casinos can be expected to include poker as an offering. Again, while most poker players do not cross over to other casino games, they may travel with spouses or other adults who do play casino games, and might be expected to spend money in non-gaming areas, such as hotels, dining and entertainment.
- We also note that policy discussions in Florida – as evidenced in the scenarios we have analyzed here – limit the potential of destination resorts to no more than six.

¹² For the 12 months ended June 2013, revenue from cardrooms was 1.23 percent of GGR for the 23 largest Las Vegas Strip resorts (per Nevada Gaming Control Board), while revenue from cardrooms was 1.6 percent of GGR for the 12 casinos in Atlantic City (per New Jersey Division of Gaming Enforcement).

To be sure, that notion of limited competition would provide scant comfort to an operator who might be forced to compete with a future resort operator in a head-to-head fashion for the same customers and the same discretionary dollars.

We cannot guarantee that there would not be competition, or potential casualties, in such an environment. The ability of any existing operator to succeed or fail under a scenario of head-to-head competition rests on a variety of factors that include, but are not limited to:

- The level and quality of capital investment
- The quality of management and its marketing strategies
- The distance between competitors
- The size of the shared market
- The quality of offerings by each of the competitors
- Respective tax rates and other regulatory or statutory requirements

For guidance, we look to California as a market with some similar characteristics. California has 80 operating cardrooms (and a total of 90 licenses) yet it is home to a relatively new casino industry that generates more than \$7 billion a year in annual GGR, making it the largest gaming state in the nation as measured by revenue.¹³

The offerings are clearly different in California than in Florida. In California, cardrooms can offer both poker and some house-banked card games, although the “house” is not the cardroom in such instances, but is a third-party provider that leases space from the cardrooms.¹⁴

We note that, due to a variety of factors as noted above, some cardrooms perform relatively well, while others struggle. The competition is clearly a factor, but so are macro factors such as the national recession and the decline in housing prices, both of which can have a profound impact on discretionary income in any market, according to our experience.

A 2012 article in the *Sacramento Business Journal* summarizes the situation in that region:

Card rooms, whose history in California goes back before the Gold Rush days, have mostly shed their seedy image as some operations modernize and as the industry becomes more regulated. But they remain under attack.

They’re being outflanked by tribal casinos in Northern California, with their numerous card tables, and continually challenged by a tough economy.

But with the slightest of grins escaping from their poker faces, the Sacramento region’s cardroom owners, operators and advisers say business has been good — although not great — and their outlook is positive.

¹³ Interviews with Richard Schuetz, member of California Gambling Control Commission, September 19 and 20, 2013.

¹⁴ *Ibid.*

Texas Hold'em and Asian games remain popular, they say, and televised poker championship began attracting younger players a decade ago. A state moratorium keeps additional non-tribal cardrooms from setting up shop, and online gambling in California — which would provide an extra revenue stream for cardrooms — still has a shot of being legalized in years to come.¹⁵

The article goes on to note that the annual revenue of California cardrooms was in decline from 2008 to 2010, where it was estimated at \$828.7 million.¹⁶ In 2011, estimated cardroom revenue reached \$853 million (up 2.9 percent from 2010).¹⁷ However, that does not necessarily mean that cardroom poker play increased. As noted, the cardrooms also lease out space to third-party providers that offer house-banked games. Much of that increase can be attributed to increases at those games, rather than poker.¹⁸

Competition with tribal casinos is a factor, albeit an unquantifiable one. As the *Sacramento Business Journal* noted:

The huge tribal casinos, which added poker rooms to make themselves more competitive with Nevada casinos, have the size and capital to offer every type of gambling plus amenities such as restaurants and spas, in a luxurious environment. Many of California's card clubs, in contrast, are very small with few if any amenities. The big casinos also have big overhead that the little guys don't. The small card clubs also have the advantage of location. They're usually in the heart of a community instead of requiring a longer drive like some of the tribal casinos.¹⁹

The issue of competition with existing pari-mutuels is one that the Legislature may seek to address as part of any consideration of authorizing destination resorts. Legislative options to lessen the impact include:

- Prohibiting destination resorts – or at least those that would likely compete against pari-mutuels – from offering similar games, including poker and simulcast wagers. We note, however, that this option has its own consequences. Any effort to limit the potential offerings of a destination could impact the business plan of that operator, and result in less capital investment, revenue and employment, although as noted earlier, that would likely not be a material factor.

¹⁵ Kelly Johnson, "Despite tribal casinos, cardrooms draw gamblers," *Sacramento Business Journal*, March 16, 2012; <http://www.bizjournals.com/sacramento/print-edition/2012/03/16/despite-casinos-card-rooms-gamblers.html?page=all>.

¹⁶ Ibid.

¹⁷ Casino City's Indian Gaming Industry Report 2013 Edition, p. 56-57

¹⁸ Schuetz.

¹⁹ Kelly Johnson.

- Requiring the potential operators of destination resorts to put forth their own comprehensive plans as to how they intend to address – and potentially minimize or eliminate – competitive pressures on existing pari-mutuel operators.

The latter option – particularly in a competitive bidding process – recognizes that casino licensure is a privilege granted to applicants that best meet the state’s policy goals, and that privilege comes with concomitant responsibilities such as minimizing the harm to existing state interests. This option also encourages applicants to be more creative in developing their business plans through such means as joint marketing arrangements or other efforts.

4. Capital Investment and Construction-Related Activities

For the additional pari-mutuel casinos throughout Florida that may materialize, we assume two-thirds of the locations would convert existing space (i.e., grandstand) into a casino space while one-third of the locations would build new structures to accommodate their respective casinos.

Our estimates are order-of-magnitude costs conservatively estimated for this project based on our knowledge of casino and entertainment design and construction in Florida and surrounding areas over the past several years. Additionally, we do not provide any cost estimates for land acquisition, regulatory approvals and permits, environmental analysis or remediation, if necessary, and site work, as additional investigation and engineering are necessary to make such determinations.

The following are an illustrative summary of assumptions, construction-related activities and expenses that we believe could occur to accommodate a casino with 1,000 slots-only or a casino having 1,000 slots and 30 table games; along with associated back-of-house area(s) and non-gaming amenities.

a. Grandstand Conversion (Slots Only)

- Assumptions, scope of operations:
 - 1 casino bar and associated back-of-house areas
 - 2 restaurants seating a total of 250 patrons and associated back-of-house areas
 - 1 fine-dining or casual restaurant (150 seats)
 - 1 quick-serve restaurant (100 seats)
 - Surveillance including cameras and recording capabilities
 - Computer system upgrades
 - Administrative space including regulators
 - Flat parking for 500 vehicles

- Construction-related activities and expenses:
 - Order-of-magnitude cost of construction, including soft costs of design fees and construction administration, is assumed at \$42 million.
 - This type of construction project is expected to employ an average of 92 craft tradesmen per day for the duration of the project. It is assumed that the average tradesman spends nine months on a particular construction site; therefore a total of 120 tradesmen will be employed over the expected 12-month project duration. The anticipated craft labor wages for this project is \$12.1 million.

b. New Casino Structure (Slots Only)

- Assumptions, scope of operations:
 - 1 casino bar and associated back-of-house areas
 - 1 sports bar and associated back-of-house areas
 - 3 restaurants seating a total of 260 patrons and associated back-of-house areas
 - 1 buffet (120 seats)
 - 1 fine-dining or casual restaurant (100 seats)
 - 1 quick-serve restaurant (40 seats)
 - Surveillance including cameras and recording capabilities
 - Computer system upgrades
 - Administrative space including regulators
 - Approximately 58,000 square feet of newly constructed space
 - Flat parking for 500 vehicles
- Construction-related activities and expenses:
 - Order-of-magnitude cost of construction, including soft costs of design fees and construction administration, is assumed at \$55 million.
 - This type of construction project is expected to employ an average of 80 craft tradesmen per day for the duration of the project. It is assumed that the average tradesman spends nine months on a particular construction site; therefore a total of 160 tradesmen will be employed over the expected 18-month project duration. The anticipated craft labor wages for this project is \$15.8 million.

c. Grandstand Conversion (1,000 Slots and 30 Table Games)

- Assumptions, scope of operations:
 - 1 casino bar and associated back-of-house areas

- 3 restaurants seating a total of 300 patrons and associated back-of-house areas
 - 1 buffet (140 seats)
 - 1 fine-dining or casual restaurant (120 seats)
 - 1 quick-serve restaurant (40 seats)
- Surveillance including cameras and recording capabilities
- Computer system upgrades
- Administrative space including regulators
- Flat parking for 500 vehicles
- Construction-related activities and expenses:
 - Order-of-magnitude cost of construction, including soft costs of design fees and construction administration, is assumed at \$48 million.
 - This type of construction project is expected to employ an average of 106 craft tradesmen per day for the duration of the project. It is assumed that the average tradesman spends nine months on a particular construction site; therefore a total of 138 tradesmen will be employed over the expected 12-month project duration. The anticipated craft labor wages for this project is \$14 million.

d. New Casino Structure (1,000 Slots and 30 Table Games)

- Assumptions, scope of operations:
 - 1 casino bar and associated back-of-house areas
 - 1 sports bar and associated back-of-house areas
 - 3 restaurants seating a total of 300 patrons and associated back-of-house areas
 - 1 buffet (140 seats)
 - 1 fine-dining or casual restaurant (120 seats)
 - 1 quick-serve restaurant (40 seats)
 - Surveillance including cameras and recording capabilities
 - Computer system upgrades
 - Administrative space including regulators
 - Approximately 81,000 square feet of newly constructed space
 - Flat parking for 500 vehicles
- Construction-related activities and expenses:

- Order-of-magnitude cost of construction, including soft costs of design fees and construction administration is assumed at \$64 million.
- This type of construction project is expected to employ an average of 94 craft tradesmen per day for the duration of the project. It is assumed that the average tradesman spends nine months on a particular construction site; therefore a total of 188 tradesmen will be employed over the expected 18-month project duration. The anticipated craft labor wages for this project is \$18.6 million.

Destination Resorts

We assume that “casino/resort complexes” are synonymous with “destination resorts,” as defined in Spectrum’s Part 1A report (pages 54-57). We further assume each destination resort will meet, or exceed, the following minimal standards/criteria, as was provided in previously introduced Florida legislation:

- A required minimum of \$2 billion in new development spending (excluding real estate) for each destination resort during the first five years
- Assumed first full year of operations in 2018
- A minimum of 2,000 hotel rooms
- A minimum of 5,000 gaming positions
- A significant amount of public spaces are non-casino (i.e., non-casino amenities/activities at each location)

We further assume that the physical location of each is the estimated, current population center-point of each applicable county or metropolitan statistical area (“MSA”), as denoted (even though, in practical terms, these center-points may not materialize as viable locations).

1. Capital Investment and Construction-Related Activities

The following is a summary of our construction-related activities and expense assumptions that we believe would occur pertaining to each destination resort:

- Order-of-magnitude cost of construction, including soft costs of design fees and construction administration, is assumed at \$2 billion.
- This type of construction project is expected to employ an average of 1,304 craft tradesmen per day for the duration of the project. It is assumed that the average tradesman spends nine months on a particular construction site; therefore a total of 5,216 tradesmen will be employed over the expected 36-month project duration. The anticipated craft labor wages for this project is \$563.2 million.

These estimates are order-of-magnitude costs conservatively estimated for this project based on our knowledge of casino and entertainment design and construction in Florida and surrounding areas over the past several years.

Our analysis does not provide any provisions for land acquisition, regulatory approvals and permits, environmental analysis or remediation, if necessary, and site work, as additional investigation and engineering are necessary to make such determinations.

Ramp-Up Period

Our GGR projections for new and/or expanded casinos throughout Florida do not include adjustments for a ramp-up (nor ramp-down) of operations. In our experience, many new casinos experience some degree of revenue ramp-up during at least their first two years of operations, when marketing initiatives and customer trial and retention contribute to early growth in the business. Such a ramp-up should not be considered inevitable, as some properties open strongly.

For some properties, however, the first two years tend to be significantly weaker than the third year, when operations generally stabilize and revenue growth slows to a growth level nearer the rate of inflation (absent significant marketing events, expansion or competitive changes). However, the likelihood, as well as the effects, of a ramp-up period may be more pronounced for a new casino that enters into an area/region/market where casinos are already existing and a competitive operating environment exists.

To illustrate the ramp-up phenomenon, Spectrum gathered slot revenue results from 13 casinos (all racinos) in the Northeast, where all opened within a 37-month period between January 2004 and February 2007. Slot revenue results are shown in annualized amounts for successive 12-month periods measured from the first full month of each casino’s operations. The result set is shown in the following table:

Figure 4: Ramp-up of slot revenue in the Northeast, 2004-2007

Racino Location	Open Date	Year 1 slot rev. (\$M)	Year 2 slot rev. (\$M)	Year 3 slot rev. (\$M)	Year 1 % of Year 3	Year 2 % of Year 3
Saratoga NY	Jan-04	\$83.5	\$105.7	\$118.9	70.2%	88.9%
Finger Lakes NY	Feb-04	\$63.0	\$73.6	\$87.3	72.2%	84.3%
Fairgrounds NY	Mar-04	\$34.4	\$39.4	\$42.0	81.9%	93.8%
Monticello NY	Jun-04	\$62.8	\$74.4	\$71.0	88.5%	104.8%
Batavia NY	May-05	\$23.1	\$24.8	\$30.5	75.7%	81.3%
Hollywood ME	Nov-05	\$36.5	\$43.5	\$50.0	73.0%	87.0%
Tioga NY	Jul-06	\$41.6	\$45.2	\$48.6	85.6%	93.0%
Empire City NY	Oct-06	\$364.1	\$481.4	\$531.6	68.5%	90.6%
Vernon NY	Oct-06	\$33.4	\$36.9	\$36.6	91.3%	100.8%
Mohegan Sun PA	Nov-06	\$176.1	\$187.9	\$250.2	70.4%	75.1%
Parx PA	Dec-06	\$305.9	\$400.6	\$439.1	69.7%	91.2%
Harrah’s PA	Jan-07	\$329.5	\$369.7	\$375.8	87.7%	98.4%
Presque Isle PA	Feb-07	\$172.2	\$182.4	\$186.3	92.4%	97.9%
Average		\$132.8	\$158.9	\$174.5	76.1%	91.1%

Source: Pennsylvania Gaming Control Board, New York Lottery, Maine Department of Public Safety, Spectrum Gaming Group

As illustrated, the average result for the 13 casinos indicates that the first-year slot revenue from a new casino is 76.1 percent of the third-year slot revenue result, while the second-year slot revenue from a new casino is 91.1 percent of the third-year slot revenue result. We note that first-year slot revenue was less than third-year slot revenue for all 13 casinos in our example, while second-year slot revenue was less than third-year slot revenue for 11 of the 13 casinos in our example (85 percent of sample). The average ramp-up in slot revenue from the first year to the second year was 19.7 percent.

Modeling Economic Impacts

1. General

The REMI analysis began with the calibrated Tax-PI budget provided by the Florida Office of Economic and Demographic Research (“EDR”), an arm of the Florida Legislature. This budget was calibrated by EDR’s experts to reflect the General Appropriations Bill for FY 2012 and information from the *Florida Tax Handbook*. The *Tax Handbook* provides “statutory and administering authority for all specific revenue sources, and a review of tax collections and disposition, in conjunction with base and rate information and a brief history of sources.”²⁰ A change was made to the default drivers of pari-mutuel and slots tax revenue: it was changed from demand to output. This adjustment better captures the nature of the tax revenue changes in these analyses.

2. REMI Tax-PI

REMI’s Tax-PI is a new tool for evaluating the total fiscal and economic effects of tax policy changes. Tax-PI is based on more than 30 years of experience in modeling the economic effects of tax-policy changes. As states begin to demand better methods for estimating the economic and fiscal impacts of alternative tax scenarios, they look to experts to respond with sophisticated, flexible and relevant tools that can meet their needs.

Tax-PI is a dynamic fiscal and economic impact model that captures the direct, indirect and induced fiscal and economic effects of taxation and other policy changes over multiple years (up to the year 2060). It can model the complete dynamic economic and demographic impacts of any manner of tax policy change. States need to thoroughly evaluate both the short- and long-term effects of any tax changes in order to best serve the needs of the people. Tax-PI allows state agencies to do this with a model backed by years of dependability and experience. Highlights include:

- Budget Editor: Customizable tables that users calibrate to reflect actual or projected revenue and expenditure details for the current, past or future fiscal years.

²⁰ Florida Revenue Estimating Conference, *Florida Tax Handbook, Including Fiscal Impact of Potential Changes*, p. ix; accessed via <http://edr.state.fl.us/Content/revenues/reports/tax-handbook/taxhandbook2013.pdf>.

- Taxes: Dynamic capability to adjust state-specific tax revenues. Users assign tax-specific variables to each of the custom revenue categories in order to track the fiscal effects of policy changes along with the economic effects. There is also a built-in feedback mechanism that automatically feeds revenue impacts back into the model to account for price and disposable income changes, therefore adjusting government spending accordingly.

The first step in using Tax-PI is to calibrate the model with a customized budget. A user begins this task by including at least one year of revenue and expenditure data into the budget. After the revenues and expenditures are integrated and itemized, each line item must be assigned an economic indicator. The economic indicator can be thought of as the “driver” for the revenue or expenditure item; as the indicator grows, the tax revenue grows as well. And as the indicator declines, the revenue declines with it. Potential economic indicators include variables such as output, demand, personal income and population, among others.

After the economic indicators are chosen and properly calibrated for each line item of revenues and expenditures, an appropriate policy variable must be chosen for each item as well. While the economic indicator can be thought as the driver of each revenue and expenditure item, the policy variable can be considered what is driven by the item. In other words, while changes in indicators impact the line items, changes in line items impact the policy variables. Potential policy variables include consumer price, personal taxes, production cost and government spending, among others.

Once the budget is properly calibrated with the revenue and expenditure data and the appropriate indicators and policy variables for each line item, the user creates a fiscal baseline within Tax-PI. This is done by recalibrating the Standard Regional Control that REMI generates with the updated budget. The Standard Regional Control can be thought of as the baseline forecast for the region of analysis. Therefore, this recalibration process effectively integrates the fiscal data with the economic and demographic trajectory of the region. The ensuing result gives us a fiscal forecast, or baseline, that any fiscal impact is ultimately measured against.

As soon as the fiscal forecast is generated, the user can run simulations in Tax-PI and assess the economic, demographic and fiscal impact of any given scenario. Tax-PI outputs include, but are not limited to:

- Economic results: Employment, Gross State Product, output, value added, personal income.
- Demographic results: Population by cohort (gender, ethnicity and age), economic migration.
- Fiscal results: Total revenues, total expenditures, customized budget line items.

3. Additional Model Information

REMI provides detailed descriptions of the data, methods and equations used to develop its models on the REMI website. The total amount of information would add considerable length to this report, so we have provided links below to relevant documents that are freely available. In general, these documents can be found under the “Resources” section of REMI’s website.

- Data sources and estimation procedures:
http://www.remi.com/download/documentation/pi+/pi+_version_1.4/Data_Sources_and_Estimati_on_Procedures.pdf
- Model equations:
[http://www.remi.com/download/documentation/pi+/pi+_version_1.4/PI+_v1.4_Model_Equations_\(2\).pdf](http://www.remi.com/download/documentation/pi+/pi+_version_1.4/PI+_v1.4_Model_Equations_(2).pdf)
- Summary of data sources:
http://www.remi.com/download/documentation/pi+/pi+_version_1.4/REMI_PI+_v1.4.pdf

4. Methodology for Fiscal Analysis of Casino Expansion Scenarios

The vital inputs to the REMI analysis were the estimates of GGR, non-gaming revenue, employment, initial tax revenue changes and construction costs from the analysis conducted by the other team members, as discussed above. Here we will constrain the conversation to the changes REMI made to these numbers. The first calculation was to establish a baseline scenario. A baseline is necessary for an impact analysis because such an analysis implies a change from one state to another. Without this initial condition, there can be no change. As noted elsewhere, for the baseline we chose the current law, current administration fiscal and legal framework. Most important for the purposes of this study, this framework includes the expiration of banked card game exclusivity with the Seminole Tribe and the exclusion of the Broward County facilities from revenue sharing. The agreement expires in August 2015, after which the Seminole Tribe has 90 days to cease banked card games, meaning that November and December would be the only months without such games. For modeling purposes, we assumed that the card games conclude at the end of 2015. Every other scenario that had changes in GGR and employment (12 in total) was run relative to this scenario, i.e., the inputs to Tax-PI were the difference between the two scenarios.

This assumption leads to a small disparity between the forecast by the State’s Office of Economic and Demographic Research (“EDR”) for revenues from the Compact between the State and the Seminole Tribe of Florida in FY 2016 and our implicit assumption for the same. EDR assumes that banked card games are removed in July 2015 rather than the end of December 2015, which means the revenues from these additional months of operations are not included in the baseline. Readers should note this when adding the model results to the baseline values to find the new levels. This caution only applies to FY 2016.

Spectrum’s estimates were for 2013, however these simulations begin in 2015 and continue to 2024, meaning that the initial-year estimates must be adjusted for both inflation and

the growth in the population of Floridians age 21 and over. Tax-PI's forecasts for both of these factors were used to make the necessary adjustments. REMI's inflation assumption for consumer prices is approximately 2 percent per year, which is a historically appropriate rate. The population forecast relies on Florida-specific birth and survival rates and REMI's estimates of migration to provide total population growth over time.

The pari-mutuel locations and the destination resorts are classified under different sectors according to the North American Industry Classification System ("NAICS"). Pari-mutuels are under amusement, gambling and recreation while casino hotels are under accommodations. These are the industry sectors that were used in this analysis.

REMI's modeling must account for the difference in the revenue per employee (i.e., labor productivity) of a gambling establishment relative to other establishments classified under the same NAICS industry. For example, while both are under the accommodations sector, a casino hotel will have significantly more revenue per employee than a normal four-star hotel. The analysis adds in this incremental revenue but makes an additional assumption regarding productivity growth in the gambling industries.

Our analysis assumes that the employment at the sites remains constant at the 2013 level while revenues grow with the adult population. This assumption lies between two other options: the first being that productivity grows at the same rate as the aggregate sector (i.e., amusement or accommodations) and the other that productivity does not grow at all. We easily can dismiss the latter option as unrealistic. The former, while possible, is not likely due to the nature of the employment at gambling establishments, especially with the growth in popularity of table games and non-gambling amenities. The presence of dealers, bartenders, wait staff, retail clerks, etc., will probably limit the productivity gains that the sector will see. In fact, if the gambling sector's productivity rises at the same rate as the larger sector, we would see employment fall over time.

To summarize, our assumption of constant employment falls between one assumption that would see employment increase unrealistically and another that would see employment fall unreasonably.

Of the scenarios that REMI analyzed, only scenarios A, B and E excluded any construction. The construction spending entered the model as demand and with the assumption that all construction began in the first simulation year.

Any increase in total revenues for the gambling establishments was assumed to come at the expense of existing spending, with the exception of revenues gained from net new out-of-state visitors. In other words, we assumed that the total amount of money available to Floridians to spend is not changing, thus any new spending on gambling would have to be diverted from other consumption. In our Part 1A report, we stated that gambling competes for discretionary income, but could not say with certainty with which goods and services. Therefore, here we assumed no specific or unique substitution effects between expanding gambling and any other

existing consumption activity, including lottery spending, but we do reduce consumption across all activity relative to each item's size in the household consumption basket.

The in-state versus out-of-state proportion of visitors was determined by the gravity model. We further refined this number to find two new numbers: first is the in-state proportion of the *new* GGR; second is the amount of out-of-state spending that can be attributed to new visitors. For the former, we calculated the incremental in-state proportion that would be needed to change that same proportion's average from the baseline to the scenario's value. For example, if the baseline in-state proportion is 93 percent and the scenario's value is 90 percent, then the proportion of the new activity would have to be 87 percent in order to draw the average down to 90 percent. For the latter, we assumed that 30 percent of the out-of-state proportion would represent net new visitors to Florida. These visitors would bring additional spending equal to their gambling spending. This assumption represents the typical 50/50 split between visitor spending inside and outside of destination resorts. This adjustment for non-gaming visitor spending applies only to scenarios with destination resorts, i.e., scenarios I, J, K and L.

In determining the economic impacts for each scenario under different tax rates, we created four largely identical simulations with the only difference being the underlying budget. The default budget was that provided by the Florida Office of Economic and Demographic Research (the "Default Budget"). That labeled *Florida pari-mutuel gaming tax rate* reflects all gambling taxed at Florida's prevailing pari-mutuel slots rate of 35 percent; that labeled *US median gaming tax rate* reflects all gambling taxed at the national median rate of 27 percent; and that labeled *Pennsylvania gaming tax rates* reflects all gambling in Florida taxed using the rates prevailing in Pennsylvania of 54 percent for slots and 12 percent for table games. The results will be very similar in their employment and Gross State Product numbers, which is a reflection of their identical inputs.²¹ The differences will be mainly apparent in the revenues, which show us how different rates affect the state's ability to gain revenue from expanded gaming. The average is that over the entire simulation period (2015-2024).

While we considered the four different budget assumptions above, the analyses only show three. The Default Budget does not have a mechanism for taxing non-tribal destination resorts because such establishments do not exist currently in Florida. We added a mechanism to tax these resorts at the prevailing Florida pari-mutuel gaming tax rate of 35 percent and to add the tax receipts to general revenues. We chose the prevailing tax rate because it does not require us to anticipate or suggest action by the Legislature. For similar reasons, we chose to allocate the tax revenues to general revenues rather than directing them to specific programs because that is the same treatment received by the Compact revenues gained from the existing tribal destination resorts. Once this mechanism was in place, the Default Budget and the Pari-Mutuel Rates Budget

²¹ Employment is the count of jobs relative to the base case scenario and is not cumulative. Gross state product is the net new economic activity generated in the state.

became methodologically equivalent, so the reader will see the two presented together on one table.

Revenues from the tribal destination resorts are gained as a result of the Compact with the Seminole Tribe (“Seminole Compact” or “Compact”). These revenues were calculated for each of the scenarios A-J and combinations using the estimates of tribal GGR over time and the appropriate marginal sharing rates. It should be noted that many of the scenarios would end or modify revenue sharing which is noted in the text description.

The revenue-sharing estimates were derived from the estimated direct changes in tribal GGR and as such do not include any secondary effects of economic expansion. For example, when a scenario results in more income, some of that income would be spent at Seminole casinos causing more GGR and Compact revenue. However, given that the scenarios all capture some kind of gaming expansion, we cannot be sure where this additional income would be spent and therefore cannot accurately measure induced changes in tribal GGR *separately* from the larger gambling environment. This assumption causes Compact revenues to be underestimated from their likely amounts.

The table below highlights the results that will be provided for each of the scenarios that follow in the main body of the report. All results are presented in terms of absolute annual differences relative to the Baseline scenario. In other words, it is the difference between “what would have been” and “what now shall be.” These results do not carry over values from the previous year and therefore are not cumulative. The results are statewide impacts for Florida.

Figure 5: The statewide fiscal impacts results explained

Category	Explanation
Employment	Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.
Gross State Product	Gross State Product is the market value of goods and services produced by labor and property in Florida, regardless of nationality. Gross State Product can be interpreted as net new economic activity.
Gaming Taxes	The sum of state taxes levied on non-tribal gaming activity.
Sales/Use Tax	Total sales and use taxes collected by the state.
Lottery	The revenue to the state from the lottery.
Compact Revenues	The revenue to the state from the gaming Compact with the Seminole Tribe.
All other Revenues	All other state revenues not included above.

Source: Spectrum Gaming Group, Regional Economic Models Inc.

5. Methodology for Fiscal Analysis of Patron Spending

a. General

The scenarios in this section relied on data from other sections of the report, namely the GGR per visit and participation rate for Florida resident and non-resident gamblers. Another key piece of information was visitor numbers for 2012 obtained from the website of Visit Florida.²²

²² See <http://www.visitflorida.com/en-us/media/research.html>

Spending per group was taken from the University of Florida survey conducted for this study (see Chapter III). Much as in Chapter II, the data provided by the other team members was for 2013, which means it must be adjusted for inflation and population growth. We pulled this data from Tax-PI as above.

Lastly, every section required various assumptions to transform survey results into new spending. Whenever there was any ambiguity, we chose to err on the side of assumptions that would result in more conservative economic impacts. GGR was divided between pari-mutuels and resort casinos according to the current allocation of GGR.

This section of the report does not include any estimates of revenues gained through the Compact with the Seminole Tribe. The survey questions posit an expansion of gaming without specifying its exact nature, therefore it is possible there could be no revenue sharing under some of these scenarios or that the gaming environment could change in such a way that visitors prefer non-tribal venues. These ambiguities make estimating Compact revenues for these scenarios inaccurate at best, so we have elected to exclude them. Furthermore, the estimates of gaming taxes are also underestimated due to the difficulty of producing static estimates of expected GGR.

b. Section A

This section describes the impact of current visitors extending their stay due to the presence of expanded gaming opportunities. Of all survey respondents, 14.9 percent answered “Yes” to the question. The survey also provided the length of additional time that the “Yes” respondents would stay. Answers ranged from one day to 365 days. Obviously, someone who wants to extend his stay by one year is no longer merely a tourist, from a behavioral standpoint. Even for those who chose a shorter duration, assumptions for expenditures during their stay were necessary.

Key assumptions:

- Number of new visitors is 14.9 percent of adult visitors to Florida.
- All gambling done in Florida is reallocated from gambling that would be done out-of-state. Given the nature of this survey question, we believe that this is a fair assumption.
- The only additional spending occurring during the extended stay goes to GGR. We did not assume any additional tourist spending because the lengths of stay suggested by the survey would imply many different potential spending outcomes. This assumption reduces the size of the positive impact of this scenario.
- The number of “Yes” respondents was not reduced by the participation rate in gambling activities because the nature of the question implies that only people who want to gamble would answer “Yes.”

- We created a weighted average of spending per person from the mix of respondents who answered that they would extend their stay from one to three days. We did not use those staying longer in this calculation because any additional days beyond three would result in per-person gambling expenditures far above the average annual gambling budget for Americans taken from the survey (\$533.19 per person). Weighted average gambling spending for the additional stay was \$412 per person.

c. Section B

This section describes the impact of the increase in Florida-based gambling by residents who currently gamble out of state. Of all respondents, 47.6 percent answered “Yes” to the question.

Key assumptions:

- For this simulation, the word “likely” is assumed to mean “will.”
- The number of gamblers is 47.6 percent of the adult population in Florida, adjusted for the participation rate of gambling in the state.
- No reallocation of spending is made because the survey question implies that the money is being repatriated from out of state.

d. Section C

This section describes the impact of the increase in Florida-based gambling by residents who currently do not gamble but would if additional activities were available. Of all respondents, 31.8 percent indicated some kind of willingness to participate in expanded gaming activities. The survey asked the non-gamblers to state – one a scale of 1 through 5, with 1 being “Not at all likely” and 5 being “Extremely likely” – how likely they were to gamble in Florida if gaming were expanded.

Key assumptions:

- We assigned percentage likelihoods to the 1-5 scale ranging from 0 percent to 100 percent in 25 percent increments, e.g., someone answering 3 would have a 50 percent likelihood of actually gambling.
- These percentages were then used to scale the percentage of the population who answered the survey. For example, 12.8 percent answered 3 on the survey, leading to a 6.4 percent increase in gamblers from this group ($12.8\% \times 50\% = 6.4\%$).
- The number of gamblers is the sum of the scaled percentages times the Florida adult population.
- This scenario includes a reallocation of spending away from other activities toward gambling since this group represents residents who do not currently gamble.

e. Section D

This section describes the impact of the increase in visitors to Florida rather than an alternative destination due to the availability of gaming. Of all respondents, 12.1 percent answered “Yes” to the question.

Key assumptions:

- The spending for this group is very high (\$3,205), so we assumed it to be a per-household number rather than a per-person number.
- The spending from this group was allocated across all tourism spending categories proportional to existing amounts. While the question asks if people would be more likely to visit Florida due to expanding gaming, it seems unreasonable to assume that the only activity they would engage in while there would be gambling.
- New spending is the total number of new visitors adjusted for average household size in the United States. This data was obtained from the US Census Bureau.²³

f. Section E

This section describes the impact of the decrease in visitors to Florida due to the expansion of gaming. Of all respondents, 3.8 percent answered “Yes” to the question. All assumptions are like those for Section D above, except the simulation is the removal of spending rather than the increase in spending.

Assessment of Gaming Expansion Combined with Option to End Live Pari-Mutuel Performances

The Legislature tasked Spectrum to examine the impacts of certain gaming-expansion scenarios combined with “pari-mutuel facilities given the flexibility to end live performances, with the supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.” Such analyses are presented as sub-scenarios and titled as “(with Option to End Pari-mutuels Live Events)” under applicable GGR and Related Projections and Economic/Fiscal Impacts sub-sections.

As noted in Chapter II(D)(5), Spectrum believes that the number of pari-mutuel facilities offering live events would decline from 25 to 15 if operators were allowed to cease live racing. In FY 2013, there were 13 greyhound tracks, six horse-racing tracks and six jai alai frontons that conducted live pari-mutuel events. Based on our research, Spectrum projects that a decoupling law would result in the closure of six of the 13 greyhound tracks, three of the six jai alai frontons

²³ US Census Bureau, *Households and Families: 2010*, p. 1; accessed via <http://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf>

and a quarter-horse track that offered barrel racing. And of those facilities that would continue to operate, some would offer far fewer races or games than they do now.

The facilities that stop offering live pari-mutuel events would continue to operate a cardroom or a casino, as those sectors are profitable and have been earning enough revenue to cover the losses incurred from offering live racing/games. The greyhound operators we interviewed stated that they did not expect to see a decline in their cardroom activity as a result of ceasing live racing. Attendance is so low at greyhound tracks that, for the most part, it is no longer recorded. Live handle at the tracks that would close is *de minimis*. For example, it totaled less than \$117,000 at Melbourne in FY 2013. It was just over \$200,000 at Jefferson County Kennel Club. Three of the tracks that would close – Ebro, Jefferson and Pensacola – do not offer inter-track wagering, which means their patrons do not bet on races held at other Florida tracks and their races are not sent to other Florida tracks for patrons to wager on. This fact is clearly a sign that greyhound wagering at Ebro, Jefferson and Pensacola is nearly non-existent. The live handle at the tracks that we suspect would close accounted for just 9 percent of statewide live greyhound handle.

Based on Spectrum’s experience studying gaming and racing markets across the country and on interviews and surveys conducted specifically for this Florida study, we believe that ceasing live racing at the pari-mutuel facilities noted above would have no impact on the state’s gaming industry under any scenario. Operators note that a patron who wagers on greyhound racing is normally not a poker player. The same holds true with jai alai, according to operators we spoke with. (We note that two jai alai facilities, Hamilton and Ocala, had zero live handle in FY 2013.²⁴) In horse racing, operators say they do see some crossover effect and that gross gaming revenue does increase when live racing is held. However, we do not expect any of the horse-track operators to cease live racing.

As noted above, the Legislature further directed Spectrum to assume that all horse-racing purses would be supplemented by statewide gross gaming revenue (from state-regulated casinos). We determined that a reasonable supplemental purse fund for the state’s five horse-racing tracks would be \$31.2 million, based on actual and assumed contributions from gross gaming revenue to purses from the horse tracks operating in FY 2012:

- Pompano Park, \$2.6 million
- Gulfstream, \$7.8 million
- Calder, \$8.8 million
- We further assumed \$8.3 million for Tampa Bay Downs, which is the average of Gulfstream and Calder. (We note that Tampa Bay Downs does not have a casino.)

²⁴PMW annual report, 2013,
<http://www.myfloridalicense.com/dbpr/pmw/documents/Stats/HandleandCardroom2012-2013--2013-08-05--June--YTD.pdf>.

- We assumed Hialeah Park, which opened its casino in August 2013, to have a yearly GGR contribution of \$3.8 million toward purses.

We also assumed that the supplemental purse fund would be funded by an incremental GGR tax; i.e., in addition to the 35 percent pari-mutuel slot operators currently pay. We also assume the \$31.2 million supplemental purse fund is static throughout the expansion scenarios analyzed. Therefore, the incremental, effective tax rate to fund the purses would decline as more casinos open and/or more GGR is generated statewide under these scenarios. This incremental, effective rate is provided in each sub-scenario.

As applicable, by expansion scenario, we assume a decoupling law would cause a 10 percent reduction in statewide live racing activity. The assumption translates to a 10 percent reduction in jobs in the pari-mutuel sector and a 10 percent reduction in non-gaming revenue. These reductions are relative to the Baseline scenario.

III. Gaming Expansion Scenarios

Throughout this section, Spectrum provides gross gaming revenue (“GGR”) and related projections, economic/fiscal analyses, as well as general discussion and our evaluation of the Florida casino industry as it currently exists/operates (reflecting current law/current administration), as well as under a variety of potential gaming expansion scenarios.

The gaming expansion scenarios were provided by the Legislature. For each scenario, we provide a brief analysis of the implications and considerations if a scenario were to be implemented, while we endeavor to provide relevant examples and/or empirical data from other jurisdictions that may be applicable to Florida under any of these scenarios.

Spectrum prepared and analyzed the gaming expansion scenarios provided by the Legislature, summarized as follows:

- **Baseline:** The Florida casino landscape reflects current law/current administration and that the banked card provision of the Compact will not be renewed.²⁵
- **Scenario A:** Renewal of the Seminole Tribe’s exclusive authorization to conduct banked card games on Indian lands, as defined in the Indian Gaming Regulatory Act; while Scenario A-1 includes authorization to end live performances at pari-mutuel facilities (i.e., decoupling).
- **Scenario B:** Granting the Seminole Tribe exclusive authorization to offer table games on Indian lands, as defined in the Indian Gaming Regulatory Act; while Scenario B-1 includes authorization to end live performances at pari-mutuel facilities (i.e., decoupling).
- **Scenario C:** Regulating, prohibiting, restricting and/or taxing simulated casino-style gambling at Internet sweepstakes cafes, arcade amusement centers or truck stops. This scenario was subsequently modified to discuss the implications of the prohibition of these types of casino-style gambling.
- **Scenario D:** Modifying or repealing live racing requirements for pari-mutuel facilities, including evaluation of impacts on purses and award for all forms of pari-mutuel activity.
- **Scenario E:** Changing tax rates for Class III games at pari-mutuel facilities.
- **Scenario F:** Adjusting restrictions on the number and operation of slot machines at pari-mutuel facilities in Miami-Dade and Broward counties.

²⁵ As it relates to economic impacts, the Florida Office of Economic and Demographic Research provided REMI with a budget file for Tax-PI calibrated to its understanding of current law/current administration as of June 21, 2013.

- **Scenario G:** Authorizing pari-mutuel facilities in counties other than Miami-Dade and Broward to offer slot machines.
 - **Scenario G-1** has casino sizing restrictions in place for potential, new casino locations that are in close proximity to existing casinos as a mechanism to minimize cannibalization of GGR at existing casinos.
 - **Scenario G-2** does not include a mechanism to protect GGR at existing casinos, while each potential, new casino location could have up to 2,000 slots despite proximity to existing casino locations.
- **Scenario H:** Authorizing pari-mutuel facilities to conduct table games or other Class III games.
 - **Scenario H-1** applies to the existing pari-mutuels in Broward and Miami-Dade counties only (i.e., no expansion of gaming to pari-mutuels outside of these two counties).
 - **Scenario H-2** applies to the existing pari-mutuels in Broward and Miami-Dade counties only and each would be permitted to end live performances (i.e., decoupling).
 - **Scenario H-3** applies to all pari-mutuels statewide (up to 28 locations) and includes casino sizing restrictions for potential, new casino locations that are in close proximity to existing casinos as a mechanism to minimize cannibalization of GGR at existing casinos.
 - **Scenario H-4** applies to all pari-mutuels statewide (up to 28 locations) and does not include a mechanism to protect GGR at existing casinos.
- **Scenario I:** Authorizing a limited number (two) of casino/resort complexes in Miami-Dade and/or Broward counties; while Scenario I-1 includes authorization to end live performances at pari-mutuel facilities (i.e., decoupling).
- **Scenario J:** Authorizing a limited number (six) of casino/resort complexes around the state.
- **Scenario K:** Authorizing a limited number (two) of casino/resort complexes in Miami-Dade and/or Broward counties and authorizing pari-mutuel facilities in Miami-Dade and Broward counties to conduct table games or other Class III games.
- **Scenario L:** Authorizing a limited number (six) of casino/resort complexes around the State and authorizing all pari-mutuel facilities statewide to offer both slots and table games (or other Class III games).

- **Scenario L-1** includes casino sizing restrictions for potential, new pari-mutuel casino locations that are in close proximity to existing casinos as a mechanism to minimize cannibalization of GGR at existing casinos.
- **Scenario L-2** does not include a mechanism to protect GGR at existing casinos, while each potential, new pari-mutuel casino location could have up to 2,000 slots and 60 table games despite proximity to existing casino locations.

Our economic/fiscal analyses omit two scenarios: C, because gaming in non-casinos is prohibited (as discussed in Chapter II[C]); and D, because modifying or repealing live-racing requirements does not impact analysis of gaming facilities.

Importantly, under all scenarios in this chapter, please note the following:

- All revenue projections are expressed in current dollars (unless specifically noted otherwise).
- As applicable, revenue projections and resultant fiscal impacts are adjusted for future years based upon REMI's forecasted inflationary growth, as well as with respect to changes in adult population.
- All projections include slot operations at Hialeah Park, for which we assumed a September 1, 2013 opening date (although it actually opened August 14, 2013), and at Dania Jai-Alai, for which we assume an opening date of July 1, 2014.

Baseline: Expiration of Banked Card Provision of Seminole Compact

The salient assumption under this scenario is that the Florida casino landscape reflects current law/current administration and the banked card provision of the Compact is not renewed. Specifically, under this scenario, on August 1, 2015, the Seminole Tribe will no longer be authorized to conduct such games – while the Seminole Tribe would have 90 days to close such games (we do not account for a partial year in our GGR and related projections, therefore we assume the Baseline scenario is effective January 1, 2016 – or calendar year 2016). Furthermore, all Seminole revenue-sharing ceases after 2030. This scenario assumes the existing quantity and locations of casinos in Florida do not change.

1. Implications and Considerations

It is our understanding that if this scenario were to occur, revenue sharing per the Seminole Compact would be impacted. Specifically, revenue sharing would exclude net win generated at the Seminole Tribe's Broward County facilities.

Expiration of the banked card provision of the Seminole Compact may help to level competitive playing field between the pari-mutuel casino industry and the Seminole casino enterprise, which currently offer banked card games. The absence of table games from the two Seminole Hard Rock casinos could result in a decline in tourism from higher-end gamblers who patronize these destination resort casinos instead of other options in Las Vegas, Atlantic City, Biloxi, or other jurisdictions where table games are offered.

2. GGR and Related Projections

As of June 30, 2013, we estimate there were 344 banked card table games in operation at five Seminole casinos (excluding their Brighton and Big Cypress operations). Under this scenario, we assume for modeling purposes that these table games would be removed from operations effective January 1, 2016.

Under this scenario, we project the eight pari-mutuels with slot machines would generate \$648.4 million of gross slot revenue, with net slot revenue of \$583.6 million. This level of revenue would result in revenue due to the State as follows:

- \$204.3 million under the current 35 percent rate of net slot revenue.
- \$157.6 million at the US median effective GGR tax rate of 27 percent.
- \$315.1 million at the effective rate(s) in Pennsylvania (i.e., Pennsylvania's slot and table rates to Florida's slot and table GGR, respectively).²⁶

²⁶ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

We estimate the eight Native American casinos would have \$1.81 billion of combined slot and table games revenue. Therefore, we estimate GGR from Florida's 16 casinos would be \$2.46 billion.²⁷ A summary of this scenario is in the following table:

Figure 6: Baseline – expiration of banked card provision of Seminole Compact, landscape and projections

<u>Florida Casinos</u>	<u>Baseline Scenario</u>			
	<u>Total Pari-mutuel</u>	<u>Native American</u>	<u>Destination Resorts</u>	<u>Grand Total</u>
# Locations	8	8	0	16
# Counties	2	6	0	6
# Slots	8,409	14,564	0	22,973
# Table Games	0	0	0	0
# Gaming Positions	8,409	14,564	0	22,973
GGR (\$M)	\$648.4	\$1,807.3	\$0.0	\$2,455.7
GGR / Position / Day	\$211	\$340	\$0	\$293

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate would be 23.1 percent; the rate for adults residing within a one-hour drive of a casino would be 32 percent and the rate would be 11.8 percent beyond a one-hour drive.

3. Economic/Fiscal Baseline

The following tables show the levels of the Baseline scenario taken from the Tax-PI model. Each of the economic and fiscal impacts below show the difference relative to these values. As noted in the methodology, readers should keep in mind that the Baseline value for Compact revenues for Year 2 does not include any expected revenue sharing from banked card games after July 2015. Using a simple linear projection, these revenues would be approximately \$57 million for the second half of the year.

²⁷ As noted at the beginning of Chapter III, all GGR projections in each of the scenarios are in current dollars and, as applicable, the projections and resultant fiscal impacts will be adjusted for future years based upon REMI's forecasted inflationary growth, as well as with respect to changes in adult population.

Figure 7: Baseline levels, at Default Budget/Florida Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	10,567,281	10,736,302	10,924,360	11,073,582	11,201,520	11,278,543
Gross State Product	\$953,685	\$1,005,496	\$1,062,077	\$1,119,767	\$1,177,411	\$1,233,068
Gaming Taxes	\$233.57	\$240.95	\$249.96	\$258.91	\$267.75	\$276.34
Sales/Use Tax	\$22,750.31	\$23,975.44	\$25,236.60	\$26,509.98	\$27,894.45	\$29,340.89
Lottery	\$1,777.50	\$1,803.53	\$1,828.47	\$1,852.86	\$1,877.62	\$1,901.95
Compact Revenues	\$226.90	\$113.92	\$109.72	\$109.72	\$111.92	\$111.72
All other Revenues	\$42,925.30	\$43,504.45	\$44,798.64	\$46,295.01	\$47,779.91	\$49,194.10
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	11,319,371	11,341,968	11,380,502	11,453,282	11,073,582	
Gross State Product	\$1,287,231	\$1,342,634	\$1,401,455	\$1,466,181	\$1,119,767	
Gaming Taxes	\$284.60	\$292.99	\$301.87	\$311.51	\$258.91	
Sales/Use Tax	\$30,849.90	\$32,433.94	\$34,099.29	\$35,850.19	\$26,509.98	
Lottery	\$1,926.37	\$1,950.08	\$1,974.62	\$1,998.88	\$1,852.86	
Compact Revenues	\$113.92	\$116.22	\$118.57	\$120.97	\$109.72	
All other Revenues	\$50,845.85	\$52,528.90	\$54,254.37	\$56,049.46	\$46,295.01	

Source: Spectrum Gaming Group, Regional Economic Models Inc. Jobs in units, \$ in nominal millions. Revenues in FY.

Figure 8: Baseline levels, at US median gaming tax rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	10,566,341	10,735,378	10,923,461	11,072,709	11,200,672	11,277,724
Gross State Product	\$953,616	\$1,005,426	\$1,062,006	\$1,119,695	\$1,177,339	\$1,232,996
Gaming Taxes	\$186.41	\$191.87	\$198.82	\$205.65	\$212.44	\$219.06
Sales/Use Tax	\$22,749.02	\$23,974.05	\$25,235.14	\$26,508.48	\$27,892.91	\$29,339.31
Lottery	\$1,777.31	\$1,803.33	\$1,828.28	\$1,852.67	\$1,877.44	\$1,901.77
Compact Revenues	\$226.90	\$113.92	\$109.72	\$109.72	\$111.92	\$111.72
All other Revenues	\$42,924.44	\$43,503.47	\$44,797.60	\$46,293.92	\$47,778.79	\$49,192.97
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	11,318,578	11,341,197	11,379,751	11,452,546	11,072,709	
Gross State Product	\$1,287,159	\$1,342,562	\$1,401,382	\$1,466,107	\$1,119,695	
Gaming Taxes	\$225.44	\$231.93	\$238.80	\$246.26	\$205.65	
Sales/Use Tax	\$30,848.28	\$32,432.29	\$34,097.60	\$35,848.46	\$26,508.48	
Lottery	\$1,926.20	\$1,949.91	\$1,974.45	\$1,998.72	\$1,852.67	
Compact Revenues	\$113.92	\$116.22	\$118.57	\$120.97	\$109.72	
All other Revenues	\$50,844.70	\$52,527.74	\$54,253.20	\$56,048.28	\$46,293.92	

Source: Spectrum Gaming Group, Regional Economic Models Inc. Jobs in units, \$ in nominal millions. Revenues in FY.

Figure 9: Baseline levels, at Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	10,569,514	10,738,491	10,926,493	11,075,651	11,203,520	11,280,477
Gross State Product	\$953,851	\$1,005,664	\$1,062,246	\$1,119,936	\$1,177,580	\$1,233,237
Gaming Taxes	\$345.63	\$357.54	\$371.46	\$385.44	\$399.16	\$412.40
Sales/Use Tax	\$22,753.37	\$23,978.74	\$25,240.06	\$26,513.54	\$27,898.10	\$29,344.62
Lottery	\$1,777.97	\$1,803.99	\$1,828.93	\$1,853.31	\$1,878.05	\$1,902.37
Compact Revenues	\$226.90	\$113.92	\$109.72	\$109.72	\$111.92	\$111.72
All other Revenues	\$42,927.35	\$43,506.77	\$44,801.11	\$46,297.59	\$47,782.56	\$49,196.80
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	11,321,245	11,343,789	11,382,280	11,455,032	11,075,651	
Gross State Product	\$1,287,400	\$1,342,804	\$1,401,626	\$1,466,354	\$1,119,936	
Gaming Taxes	\$425.14	\$438.06	\$451.70	\$466.52	\$385.44	
Sales/Use Tax	\$30,853.71	\$32,437.85	\$34,103.31	\$35,854.31	\$26,513.54	
Lottery	\$1,926.78	\$1,950.48	\$1,975.01	\$1,999.27	\$1,853.31	
Compact Revenues	\$113.92	\$116.22	\$118.57	\$120.97	\$109.72	
All other Revenues	\$50,848.57	\$52,531.65	\$54,257.14	\$56,052.24	\$46,297.59	

Source: Spectrum Gaming Group, Regional Economic Models Inc. Jobs in units, \$ in nominal millions. Revenues in FY.

Scenario A: Seminole Banked Card Game Exclusivity

The salient assumption under this scenario is that the Florida casino landscape reflects current law/current administration, while the banked card provisions of the Seminole Compact are renewed for an additional 15 years and the Compact is not otherwise amended.

1. Implications and Considerations

It is our understanding that if this scenario were implemented, the revenue sharing agreement in place (per the Seminole Compact) would continue.

This scenario would effectively extend the status quo and as such would not address economic concerns expressed by pari-mutuel operators outside of Broward and Miami-Dade counties with respect to their ability/desire to have gaming operations. The recent opening of slots at Hialeah Park and assumed 2014 opening of slots at Dania Jai-Alai will heighten the competitive pressures in the South Florida market, leading to possible capital constraints and diminished marketing in the face of the Seminole gaming operations.

2. GGR and Related Projections (Scenario A)

Under this scenario, we project the eight pari-mutuels with slot machines would generate \$607.8 million of gross slot revenue, with net slot revenue of \$547 million. This level of revenue would result in revenue due to the State as follows:

- \$191.4 million under the current 35 percent rate of net slot revenue.
- \$147.7 million at the US median effective GGR tax rate of 27 percent.
- \$295.4 million at the effective rate(s) in Pennsylvania (i.e., Pennsylvania’s slot and table rates to Florida’s slot and table GGR, respectively).²⁸

We estimate the eight Native American casinos would have \$2.06 billion of combined slot and table games revenue. Therefore, we estimate GGR from Florida’s 16 casinos would be \$2.67 billion.²⁹ A summary of this scenario is in the following table:

Figure 10: Scenario A – renewing Seminole Compact, landscape and projections

Florida Casinos	Current Law/ Current Administration - Banked Card provision of Seminole Compact renewed				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	8	8	0	16	0	0.0%
# Counties	2	6	0	6	0	0.0%
# Slots	8,409	14,564	0	22,973	0	0.0%
# Table Games	0	344	0	344	344	n/a
# Gaming Positions	8,409	16,628	0	25,037	2,064	9.0%
GGR (\$M)	\$607.8	\$2,062.2	\$0.0	\$2,670.0	\$214.3	8.7%
GGR / Position / Day	\$198	\$340	\$0	\$292	(\$1)	-0.2%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate would be 23.1 percent; the rate for adults residing within a one-hour drive of a casino would be 32 percent and the rate would be 11.8 percent beyond a one-hour drive.

3. Economic/Fiscal Impacts (Scenario A)

Next, we determine the economic impacts of Scenario A. This scenario does not include construction and does include Compact revenues. The results are presented as annual differences relative to the Baseline scenario.

A key point about Scenario A is that it is the same as the Baseline until the expiration of banked card game exclusivity which explains the zero values for Year 1. The results for this scenario are also characterized by a shift in gambling activity toward the Indian casinos. This shift results in the reduction of gaming taxes and the increase in Compact revenues relative to the Baseline.

²⁸ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

²⁹ As noted at the beginning of Chapter III, all GGR projections in each of the scenarios are in current dollars and, as applicable, the projections and resultant fiscal impacts will be adjusted for future years based upon REMI’s forecasted inflationary growth, as well as with respect to changes in adult population.

The annual results are presented below. The average of the entire analysis period is also presented which gives a better picture of the ongoing effect than the values of any one year. Over the course of the simulation, the average employment is 2,362 jobs and Gross State Product is \$241 million. Total state revenues increase an average of \$128.3 million under the Default Budget.

Figure 11: Scenario A – renewal of Seminole Compact – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	0	2,969	2,634	2,362	2,133	1,954
Gross State Product	\$0	\$263	\$250	\$241	\$233	\$228
Gaming Taxes	\$0.00	(\$6.12)	(\$12.49)	(\$13.00)	(\$13.51)	(\$14.01)
Sales/Use Tax	\$0.00	\$2.01	\$4.05	\$4.07	\$4.08	\$4.07
Lottery	\$0.00	(\$4.90)	(\$9.63)	(\$9.71)	(\$9.81)	(\$9.94)
Compact Revenues	\$0.00	\$71.05	\$145.29	\$151.86	\$158.71	\$165.72
All other Revenues	\$0.00	\$1.42	\$2.95	\$3.18	\$3.29	\$3.33
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	1,817	1,716	1,635	1,581	2,362	
Gross State Product	\$225	\$224	\$225	\$227	\$241	
Gaming Taxes	(\$14.51)	(\$14.99)	(\$15.46)	(\$15.93)	(\$13.00)	
Sales/Use Tax	\$4.08	\$4.12	\$4.16	\$4.22	\$4.07	
Lottery	(\$10.07)	(\$10.20)	(\$10.31)	(\$10.39)	(\$9.71)	
Compact Revenues	\$172.75	\$179.71	\$186.60	\$193.45	\$151.86	
All other Revenues	\$3.34	\$3.34	\$3.33	\$3.32	\$3.18	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

4. GGR and Related Projections (with Option to End Pari-Mutuel Live Events, Scenario A-1)

In this sub-scenario, pari-mutuel facilities would be permitted to end live performances, with supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.

GGR projections (to determine fiscal impacts) for this scenario mimic our projections per Scenario A. However, in addition to aforementioned revenue-due-to-the-State figures, we project \$31.2 million would need to be generated for horse purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the incremental rate to generate such purse subsidies would be 5.13 percent under this scenario; however, this rate would be 5.7 percent based on taxable GGR.

5. Economic/Fiscal Impacts (with Option to End Pari-Mutuel Live Events, Scenario A-1)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget. (See Chapter I[H] for methodology detail.) This scenario does not include any construction and does include Compact revenue. Over the course of the simulation, the average employment is 1,911 jobs and Gross State Product is \$233 million. Total state revenues average \$127.2 million under the Default Budget.

Figure 12: Scenario A-1 – renewal of Seminole Compact and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	-471	2,502	2,175	1,911	1,691	1,519
Gross State Product	(\$9)	\$254	\$242	\$233	\$225	\$220
Gaming Taxes	(\$0.01)	(\$6.15)	(\$12.52)	(\$13.03)	(\$13.54)	(\$14.04)
Sales/Use Tax	(\$0.23)	\$1.51	\$3.49	\$3.48	\$3.44	\$3.39
Lottery	(\$0.02)	(\$4.93)	(\$9.66)	(\$9.74)	(\$9.83)	(\$9.95)
Compact Revenues	\$0.00	\$71.05	\$145.29	\$151.86	\$158.71	\$165.72
All other Revenues	(\$0.07)	\$1.22	\$2.65	\$2.81	\$2.87	\$2.86
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	1,383	1,283	1,206	1,154	1,911	
Gross State Product	\$217	\$217	\$216	\$219	\$233	
Gaming Taxes	(\$14.54)	(\$15.02)	(\$15.49)	(\$15.96)	(\$13.03)	
Sales/Use Tax	\$3.36	\$3.35	\$3.35	\$3.37	\$3.48	
Lottery	(\$10.09)	(\$10.21)	(\$10.32)	(\$10.40)	(\$9.74)	
Compact Revenues	\$172.75	\$179.71	\$186.60	\$193.45	\$151.86	
All other Revenues	\$2.84	\$2.81	\$2.77	\$2.74	\$2.81	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Under this scenario, we believe it is reasonable to expect net direct employment of 12,465 FTEs.

Scenario B: Seminole Table Games Exclusivity

The salient assumption under this scenario is that the Florida casino landscape reflects current law/current administration, with the same exceptions and exclusions described in Scenario A above, as well as with the addition of table games that may include roulette and craps at five Seminole casinos (excluding Brighton and Big Cypress). We assume these table games would be incrementally added to the existing casino supply, and we model/allocate the number and types of games according to the table games allocation data for the largest Las Vegas Strip casino operators as of the last 12 months ended May 2013.

The largest Las Vegas Strip casinos (23 in total) had 2,109 table games in operation, while 383 (18.2 percent) were roulette and craps games. Florida's five relevant Native American casinos had 344 table games in operation as of June 30, 2013.³⁰ Applying the aforementioned ratio from Nevada to Florida's Native American casinos (and assuming a static/current level of 344 table games, net of roulette and craps) would mean Florida's Native American casinos would add 74 other table games, such as roulette and craps, thereby increasing total table games counts to 418.

Under this scenario, we estimate there will be 22,973 slot machines and 418 table games (and 25,481 gaming positions) at 16 casinos throughout Florida. Assuming existing casinos do not add or subtract gaming positions from their counts as of June 30, 2013, under this scenario, Broward and Miami-Dade counties would have 69.5 percent of the total statewide gaming positions and Hillsborough County would have 23.1 percent. There would still be six counties in Florida with at least one casino.

1. Implications and Considerations

It is our understanding that if this scenario were implemented, the revenue-sharing agreement with the Seminole Tribe would be renegotiated. As such, this scenario would provide the Seminole Tribe with greater, potential economic benefit, which could in-turn yield greater revenue sharing, all other things being equal (as our estimates are based on the current revenue sharing agreement).

As our projections in this scenario indicate, granting table-games exclusivity to the Seminole casinos – with the addition of craps and roulette games – would result in additional revenue and, presumably, profit for the Seminole Tribe. The State of Florida may want to consider whether a more substantial revenue-sharing agreement is warranted for this privilege.

Granting the Seminole Tribe table games exclusivity could widen the revenue gap between the Seminole casinos and the pari-mutuel casinos, creating deterioration of operating performance for the pari-mutuels. This could result in declining revenue and financial performance for the pari-mutuel operators, leading to lower capital reinvestment and less-attractive facilities.

2. GGR and Related Projections (Scenario B)

Under this scenario, we project the eight pari-mutuels with slot machines would generate \$607.8 million of gross slot revenue, with net slot revenue of \$547 million. This level of revenue would result in revenue due to the State as follows:

- \$191.4 million under the current 35 percent rate of net slot revenue.
- \$147.7 million at the US median effective GGR tax rate of 27 percent.

³⁰ Based on information received from the Seminole Tribe of Florida.

- \$295.4 million at the effective rate(s) in Pennsylvania.³¹

We estimate the eight Native American casinos would have \$2.117 billion of combined slot and table games revenue. Therefore, we estimate GGR from Florida’s 16 casinos would be \$2.725 billion.

We project the addition of 74 table games (i.e., those currently not permitted, but which may include roulette and craps games) to five Seminole casinos would increase statewide annual GGR by \$269.3 million (from what would otherwise occur – under Baseline scenario). A summary of this scenario is in the following table:

Figure 13: Scenario B – Seminole addition of craps/roulette games, landscape and projections

Florida Casinos	Granting Seminole Tribe exclusive authorization to offer Class III table games				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
	# Locations	8	8	0	16	0
# Counties	2	6	0	6	0	0.0%
# Slots	8,409	14,564	0	22,973	0	0.0%
# Table Games	0	418	0	418	418	n/a
# Gaming Positions	8,409	17,072	0	25,481	2,508	10.9%
GGR (\$M)	\$607.8	\$2,117.3	\$0.0	\$2,725.1	\$269.3	11.0%
GGR / Position / Day	\$198	\$340	\$0	\$293	\$0	0.0%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be 23.1 percent, while this rate for adults residing within a one-hour drive of a casino would be 32 percent and the rate would be 11.8 percent for those living beyond a one-hour drive of a casino.

3. Economic/Fiscal Impacts (Scenario B)

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter II[H] for methodology detail). This scenario does not include construction and does include Compact revenues. The results are presented as annual differences relative to the Baseline scenario.

A key point regarding Scenario B is that it is the same as the Baseline until the expiration of banked card game exclusivity, which explains the zero values for Year 1. The results for this scenario are also characterized by a shift in gambling activity toward the Indian casinos. This shift results in the reduction of gaming taxes and the increase in Compact revenues relative to the Baseline.

The annual results are presented below. The average of the entire analysis period is also presented, which provides a better picture of the ongoing effect than the values of any one year.

³¹ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

Over the course of the simulation, the average employment is 2,711 jobs and Gross State Product is \$283 million. Total state revenues increase an average of \$137.4 million under the Default Budget.

Figure 14: Scenario B – Seminole table game exclusivity – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	0	3,370	3,009	2,711	2,462	2,269
Gross State Product	\$0	\$305	\$292	\$283	\$275	\$270
Gaming Taxes	\$0.00	(\$5.94)	(\$12.14)	(\$12.64)	(\$13.15)	(\$13.65)
Sales/Use Tax	\$0.00	\$2.25	\$4.54	\$4.59	\$4.61	\$4.62
Lottery	\$0.00	(\$5.28)	(\$10.38)	(\$10.46)	(\$10.56)	(\$10.69)
Compact Revenues	\$0.00	\$75.57	\$154.48	\$161.34	\$168.50	\$175.82
All other Revenues	\$0.00	\$1.58	\$3.28	\$3.55	\$3.70	\$3.75
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	2,116	2,009	1,926	1,865	2,711	
Gross State Product	\$268	\$268	\$269	\$272	\$283	
Gaming Taxes	(\$14.14)	(\$14.61)	(\$15.07)	(\$15.53)	(\$12.64)	
Sales/Use Tax	\$4.64	\$4.69	\$4.77	\$4.85	\$4.59	
Lottery	(\$10.83)	(\$10.96)	(\$11.07)	(\$11.14)	(\$10.46)	
Compact Revenues	\$183.17	\$190.44	\$197.64	\$204.79	\$161.34	
All other Revenues	\$3.77	\$3.79	\$3.80	\$3.81	\$3.55	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

4. GGR and Related Projections (with Open to End Pari-Mutuel Live Events, Scenario B-1)

In this sub-scenario, pari-mutuel facilities would be permitted to end live performances, with supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.

GGR projections (to determine fiscal impacts) for this scenario mimic our projections per Scenario B. However, in addition to aforementioned revenue-due-to-the-State figures, we project \$31.2 million would need to be generated for purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the rate to generate such purse subsidies would be 5.13 percent under this scenario; however, this rate would be 5.7 percent based on taxable GGR.

5. Economic/Fiscal Impacts (with Option to End Pari-Mutuel Live Events, Scenario B-1)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget. (See Chapter I[H] for methodology detail.) This combination scenario captures the effects of a reduction in live racing in addition to the changes introduced in Scenario B. This scenario does not include a construction component and does include Compact revenues. Over the course of the simulation, the average employment is 2,261 and Gross State Product is \$275 million. Total state revenues average of \$136.3 million under the Default Budget.

Figure 15: Scenario B-1 – Seminole Tribe has table games exclusivity and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	-471	2,901	2,549	2,261	2,020	1,832
Gross State Product	(\$9)	\$296	\$284	\$275	\$268	\$262
Gaming Taxes	(\$0.01)	(\$5.97)	(\$12.17)	(\$12.67)	(\$13.18)	(\$13.68)
Sales/Use Tax	(\$0.23)	\$1.75	\$3.99	\$4.00	\$3.98	\$3.94
Lottery	(\$0.02)	(\$5.32)	(\$10.42)	(\$10.49)	(\$10.59)	(\$10.71)
Compact Revenues	\$0.00	\$75.57	\$154.48	\$161.34	\$168.50	\$175.82
All other Revenues	(\$0.07)	\$1.38	\$2.99	\$3.20	\$3.29	\$3.30
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	1,688	1,579	1,498	1,441	2,261	
Gross State Product	\$260	\$260	\$261	\$264	\$275	
Gaming Taxes	(\$14.17)	(\$14.64)	(\$15.11)	(\$15.56)	(\$12.67)	
Sales/Use Tax	\$3.93	\$3.94	\$3.97	\$4.01	\$4.00	
Lottery	(\$10.85)	(\$10.97)	(\$11.08)	(\$11.15)	(\$10.49)	
Compact Revenues	\$183.17	\$190.44	\$197.64	\$204.79	\$161.34	
All other Revenues	\$3.30	\$3.28	\$3.27	\$3.26	\$3.20	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Under this scenario, we believe it is reasonable to expect net direct employment of 12,836 FTEs.

Scenario C: Gaming in Non-Casinos

Gambling in non-casinos such as Internet/sweepstakes cafes, adult arcades, truck stops, and other locations with electronic gaming devices of questionable legal standing – commonly referred to as “gray market” gambling – was effectively shut down on April 10, 2013, when Governor Rick Scott signed HB 155. This bill gave law enforcement the tools necessary to enforce existing prohibitions of these types of gambling.

The law became effective after the Legislature commissioned this three-part gaming study being conducted by Spectrum. Accordingly, and as a result of discussion with Legislative staff, Spectrum will not be analyzing the economic impacts if these forms of gambling were to be regulated or restricted. Rather, we are providing a discussion regarding the size and economic ramifications of closure of these casino-style gambling locations.

Illegal gambling is impossible to accurately quantify because there are no public records. Illegal gambling nationwide may generate as much as \$150 billion annually, according to Havocscope, a website that attempts to quantify illegal gambling.³² A 2011 *Bloomberg Businessweek* article estimated at the time that there were 3,000 to 5,000 Internet cafes operating nationwide, generating \$10 billion to \$15 billion dollars in annual revenue.³³ *Bloomberg Businessweek* estimated the nationwide revenue from Internet cafes through interviews with current equipment suppliers, finding that a single terminal in a successful location generates between \$1,000 and \$5,000 per month in gross revenue. Using this information, the author extrapolated that a moderately sized establishment offering 100 machines could therefore gross around \$250,000 per month, or \$3 million annually.³⁴ All of which would suggest that in less than a decade, Internet cafes in the United States have grown into a collective \$10 billion to \$15 billion industry.

The Florida League of Cities estimated at the time of the HB 155 passage that there were 1,000 Internet cafes operating throughout the state and potentially producing \$1 billion in annual revenue.³⁵ This figure may have come from a 2011 *New York Times* story,³⁶ which has been widely cited in the discussion of the state's Internet cafes.

A white paper commissioned by the American Gaming Association, produced in opposition to Internet cafes, included a transactional analysis of an Internet sweepstakes café in Palm Harbor, FL.³⁷ The analysis documented that over a six-week period, from June 1 to July 15, 2012, on 171 out of a total of 640 customer visits, customers purchased at least \$100 worth of

³² Havocscope, "Illicit Trade Value: United States"; <http://www.havocscope.com/tag/united-states/>.

³³ Felix Gillette, "The Casino Next Door," *Bloomberg Businessweek*, April 11, 2011; http://www.businessweek.com/magazine/content/11_18/b4226076180073.htm

³⁴ Ibid.

³⁵ "Florida Internet Cafes, "Legislative Indecision Requires Local Governments to Make Tough Choices," *Florida League of Cities*; <http://www.floridaleagueofcities.com/Assets/Files/Pre-emptionThreatsInternetCafeDRussell.pdf> .

³⁶ Don Van Natta, "Worries about 'Convenience Casinos' in Florida," *New York Times*, May 6, 2011; http://www.nytimes.com/2011/05/07/us/07sweepstakes.html?pagewanted=all&_r=0.

³⁷ David O. Stewart, Ropes & Gray, L.L.C., *Internet Sweepstakes Cafes: Unregulated Storefront Gambling in the Neighborhood*, American Gaming Association; http://www.wral.com/asset/news/state/nccapitol/2012/10/12/11652958/internet_sweepstakes_white_paper_final.pdf .

Internet access, which, priced at 3 cents per minute would translate into more than 55 hours of access time. Customers received sweepstakes entries for time purchased. Additionally during the six-week period, 12 of those customers purchased more than \$1,000 of access time, or a total of 550 hours of access, and one customer purchased more than 231,000 minutes, or a total of 4,000 hours.³⁸ Clearly, Internet sweepstakes are the primary driver of this business model.

Revenue generated by Internet cafes prior to the ban was not subject to any gaming tax, nor were the operations governed by any state or local regulatory regime. Internet cafes did, however, generate sales taxes, corporate taxes and employment taxes and, thus, exerted a previously unquantified effect on the Florida economy. Corporate taxes were minimized by some Internet cafe operations by filing as a nonprofit enterprise, as widely reported in the Allied Veterans of the World situation, but even charitable organizations are required to file a Florida corporate tax return and pay the Florida corporate tax at a rate of 5.5 percent.³⁹

The passage of HB 155 also affected slot-style gambling at roughly 200 adult arcades throughout the state. The new legislation clarified that arcade devices must be coin-operated “games of skill” that cannot award more than \$0.75 in winnings per play.⁴⁰ Further, it clarified that arcade operators may not offer gift cards as prizes or promotional incentives.⁴¹ These restrictions on the use of cash or credit cards and the limitation on prizes and payouts have effectively shut down numerous adult arcades in Florida. While most adult arcades are not as dependent upon gambling devices to the extent Internet cafes are, the passage of the legislation has caused many arcades to close, with the subsequent loss of jobs and related sales and employment tax revenues. Gale Fontaine, President of the Florida Arcade and Bingo Association, told Spectrum that each arcade before HB 155 passed had, on average, 10 employees – six of whom were full-time. She estimated that as few as 50 adult arcades are operating today, down from 200 before the bill passed. Those still operating are generating only a small fraction of the revenue they were beforehand, Fontaine said. She noted that some of the arcades that closed are planning to reopen.

Also affected by the legislation are “maquinitas,” video gaming machines similar to arcade slots, as well as Internet cafe terminals, found in small corner convenience stores primarily in Miami-Dade County, and slot-like devices in gas stations, truck stops, convenience

³⁸ Ibid.

³⁹ The Florida Senate, *Review Internet Cafes Used for Electronic Game Promotions, Interim Report, 2012-137*, October 2011; <http://www.flsenate.gov/PublishedContent/Session/2012/InterimReports/2012-137ri.pdf>.

⁴⁰ Kathleen Haughney, “Gov. Rick Scott signs bill banning Internet cafes,” *Orlando Sentinel*, April 10, 2013; http://articles.orlandosentinel.com/2013-04-10/news/os-scott-signs-internet-cafe-ban-20130410_1_florida-arcade-association-group-allied-veterans-gale-fontaine.

⁴¹ Laura Layden, “Lawsuit seeks to reopen Florida senior arcades, but not Internet cafes,” *Naples Daily News*, April 20, 2013; <http://www.naplesnews.com/news/2013/apr/20/lawsuit-reopen-florida-senior-arcades-cafe-fla/>.

stores, restaurants and bars throughout the state. Miami Police Chief Manuel Orosa estimated that there were more than 1,000 maquinitas operating in the city prior to passage of HB 155.⁴² A 2011 report estimated there were 1,500 maquinitas in the city, perhaps generating \$78 million per year in gaming revenue.⁴³

The data for these forms of gray-market gambling in Florida – Internet cafes, adult arcades and maquinitas – cannot support credible analysis because they are anecdotal; reliable data do not exist. Accordingly, Spectrum cannot provide credible projections as to the size and economic impacts of gray-market gambling.

The closure of gray-market gambling locations and devices statewide certainly caused the immediate elimination of a significant number of jobs in Florida. The reallocation of the gray-market gambling dollars to other, legal forms of gambling – or to other areas of discretionary spending – may result in increased employment at the businesses that benefit from the newfound dollars, but the extent of the employment impact cannot be credibly projected.

We do note that the Florida Lottery appears to be benefiting from the crackdown on gray-market gambling. Dennis Harmon said at a state revenue-estimating conference in July 2013 that the Lottery is already seeing an increase in sales of scratch-off product.⁴⁴ “We have an impression by our people that it has helped the scratch-off games,” Harmon said. He later mentioned similar increases in the Cash 3, Play 4 and Fantasy 5 games in his remarks.⁴⁵ Harmon went on to tell *The Tampa Tribune*, “I wouldn’t call this a loose correlation. We see some evidence of a modest, positive impact from (the ban) on those games, but we have not yet quantified it.” Harmon further explained that Florida Lottery preliminary results show a \$66 million increase in actual sales compared to sales projections for scratch-off games and a \$10.3 million rise in results for Cash 3, Play 4 and Fantasy 5 in the short period between the passage of the HB 155 on April 10, 2013, and the end of the fiscal year on June 30, 2013.⁴⁶

⁴² Charles Rabin, “Miami Police Make Arrests and Seize ‘Maquinitas’ as Mayor Does About-Face,” *The Miami Herald*, April 18, 2013; <http://www.miamiherald.com/2013/04/18/3352109/miami-police-make-arrests-and.html>.

⁴³ Kirk Nielsen, “Quality of Vice: Voters may not have known it, but gambling, both legal and illegal, was a big part of the recent mayoral election,” Poder360, July 2011; http://www.poder360.com/article_detail.php?id_article=5812.

⁴⁴ James L. Rosica, “Official: Internet cafe ban boosts Lottery sales,” *The Tampa Tribune*, July 15, 2013; <http://tbo.com/news/politics/official-internet-cafe-ban-boosts-lottery-sales-20130715/>.

⁴⁵ Ibid.

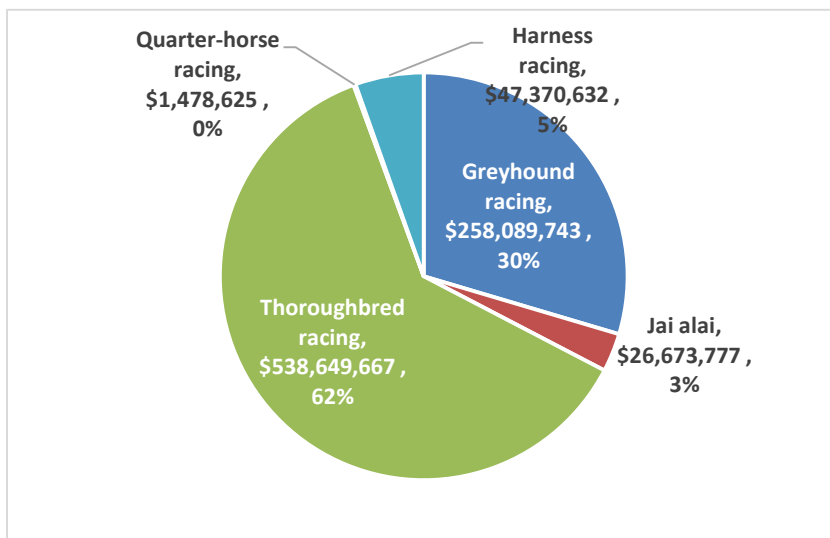
⁴⁶ Ibid.

Scenario D: Modifying or Repealing Live Racing Requirements

Florida’s pari-mutuel landscape would look much different if pari-mutuel operators were not required to offer live performances as a condition of operating a cardroom or slot machines, or both. Simply put, the ability to “decouple” racing from gaming would result in a lot less greyhound racing and a lot less jai alai.

In FY 2013, 13 greyhound tracks, six horse racing tracks and six jai alai frontons conducted live pari-mutuel events. We believe that a decoupling law would result in the closure of six of the 13 greyhound tracks, three of the six jai alai frontons, and a quarter-horse track that offered barrel racing. And of those facilities that would continue to operate, some would offer far fewer races or games than they do now.

Figure 16: Florida total pari-mutuel handle by sector, FY 2013



Source: Florida Division of Pari-Mutuel Wagering

We acknowledge that our estimates of the impact of a decoupling law are speculative. They are based on conversations with various stakeholders as well as an online survey that Spectrum asked pari-mutuel operators to complete in July-August 2013. The decisions of operators will be largely based on the type of decoupling law that would be passed. For the purposes of our analysis, Spectrum assumed that a decoupling law would not negatively impact operators that chose to cease live racing. We assumed that their decision to cease live racing/games would not result in their having to shut down their cardrooms and casinos.

The following three pari-mutuel operators declined to participate in our survey: Sanford Orlando Kennel Club, Dania Jai-Alai, and Casino Miami Jai-Alai/Fort Pierce Jai-Alai (owned by the same company). Calder declined to formally answer survey questions, but officials answered questions relating to it. We assumed that all of those facilities would continue to operate but would reduce performances.

Participants were asked, among other things:

- Would they stop offering live pari-mutuel events as soon as possible?
- Would they continue to operate indefinitely?
- Would they reduce their performances?

Our estimates may be understated because some of the pari-mutuel operators we spoke with said they would not publicly answer our survey questions because of the potential or likely political fallout from speaking honestly. Privately, they told us that the pari-mutuel laws need to be rewritten to take into account the fact that horse racing, greyhound racing and jai alai are not as popular as they once were. Forcing operators to conduct their business models based on an environment that existed 20 or 30 years ago makes no sense, they argue, noting that it costs them millions of dollars every year to operate under such a policy. On the other hand, horsemen and breeders make the case that without the pari-mutuel activity, cardrooms and casinos would not exist and that if changes are to be made regarding the live-racing requirement, they need to be submitted to the voters for their consideration. Anything less, they argue, would violate the public trust.

a. Jai Alai Impact

The three jai alai frontons that we believe would close are Hamilton, Ocala and Orlando, which in FY 2012 accounted for 18 percent of all jai alai performances but just 4 percent of total jai alai handle and 8 percent of player awards. Jai alai, as a sector, generated just \$378,000 in State revenue, which amounted to 2.7 percent of overall State revenue collected from the pari-mutuel sector.⁴⁷ Fort Pierce generated \$16,800 in FY 2012 tax revenue; Hamilton \$7,680; Ocala \$38,000; and Orlando \$49,440.⁴⁸ Officials from Florida's Division of Pari-Mutuel Wagering (PMW) could not provide any estimates of regulatory costs by sector, let alone by facility. But it appears that the numbers cited above are so low that they suggest that other sources of revenue may be required to fund the regulatory costs of overseeing them.

Hamilton and Ocala officials indicated that their facilities would no longer offer live games. Orlando officials said they are uncertain as to what they would do but would cut performances by 75 percent if they did continue to offer jai alai games. Our belief is that Orlando would close within three years if a decoupling law were passed. Fort Pierce and Miami Jai-Alai frontons lost nearly \$12 million in FY 2012 on their pari-mutuel operation, according to financial reports they submitted to the State. Dania Jai-Alai lost \$1.7 million. The auditor for Fort Pierce-Miami stated that the losses were so severe that he had questions whether the entity could stay in

⁴⁷ Florida PMW, Annual Report, FY 2012.

⁴⁸ Ibid.

business.⁴⁹ Fort Pierce, Miami and Dania accounted for 82 percent of the 803 jai alai performances in FY 2012.⁵⁰ We believe that if decoupling were to occur, Fort Pierce, Miami and Dania Jai-Alai would either stop offering jai alai or would reduce performances.

As we indicated, the facilities we would expect to close accounted for very little of player awards. Hamilton paid out less than \$24,000 in FY 2012. Unlike other sectors, we do not see the other jai alai frontons recapturing those player awards. We believe that the downward trend in player awards will continue.

b. Thoroughbred Impact

All three thoroughbred operators said they would continue to offer live racing if a decoupling bill were passed, and Calder and Gulfstream indicated they would not expect to reduce performances. Tampa Bay Downs officials say they, too, would continue to offer live racing and that performances would be reduced only if track officials have difficulty obtaining horses, which is a possibility because Tampa Bay is the only Florida thoroughbred track without slot revenue to supplement its purses. It is struggling to attract top-tier horses because its purses are not competitive with those offered at Calder and Gulfstream, which do receive supplements from slot revenue.

We note that the horsemen and breeders we interviewed were troubled over the prospect of a decoupling bill becoming law. Despite the claims of thoroughbred operators, they believe that within five years, there would be a significant reduction in the amount of thoroughbred racing, which they say would have a devastating impact on horse farms and breeding operations in the state. One exception, they said, would be Gulfstream, which appears to be looking to race year-round.

There is no indication that purses, at least in the near future, would decline in a decoupling environment. We note that they have increased 27 percent, from \$63.8 million in FY 2010 to \$81.1 million in FY 2012. And with increased performances from Gulfstream, we would expect that trend to continue. Operators are already offering performances far in excess of what the State statute requires. Therefore, we see decoupling, at least in the near future, having little impact on thoroughbred purses, as operators insist they plan on expanding racing activity regardless of what the Legislature does. In short, we do not see any track closures or even reductions in performances on a statewide level.

c. Harness Impact

In the harness racing sector, there is only one track: Isle Casino Racing at Pompano Park. Isle officials say they would continue to offer live racing but would reduce performances by 25

⁴⁹ FY 2012 Annual Financial Report submitted to PMW.

⁵⁰ Florida PMW, Annual Report, FY 2012.

percent from 140. Despite the presence of a casino, purses have fallen from \$9.5 million in FY 2006 (the last full fiscal year that Pompano did not have a casino) to \$7.4 million in FY 2012, a decline of 22 percent.⁵¹

We would expect the purse decline to continue if decoupling were to become law. The operator said it is sustaining a multimillion-dollar loss each year, and can be expected to reduce purses even further if it could do so. We would expect purses to fall by as much as 50 percent, to \$3.7 million.

Joseph Pennacchio, president of the Florida Standardbred Breeders and Owners Association, said he believes that Isle would cease live racing if it could, and would do so as soon as possible. One of the reasons for the sharp decline in handle and purses at Pompano, according to Pennacchio, is because the operator has failed to maintain the facility. Spectrum toured the facility earlier this year and found it to be in a state of disrepair (in contrast to the well-maintained adjacent casino). The operator has indicated in an interview with Spectrum that it may close the grandstand in the fall, which would prevent patrons from watching races at the finish line. Ceasing live operations would destroy the standardbred breeding business, which also would adversely affect small horse farms throughout the state, Pennacchio said. Breeding activity already has seen much less activity as a result of purse declines, he noted.

d. Greyhound Impact

Much of the overall pari-mutuel contraction from decoupling would occur in the greyhound sector. Our estimate is that performances would decline by nearly 40 percent. We base that reduction on the closure of the six greyhound tracks and a reduction as well in performances at three other tracks. We would expect that there would be little, if any, recapture of those performances at the five tracks that continue to operate, as most of them are already running year-round.

The six greyhound facilities that Spectrum believes would cease to offer live racing are: Jefferson County Kennel Club, Melbourne Greyhound Park, Pensacola Greyhound Track, Sarasota Kennel Club, Ebro Greyhound Park and Mardi Gras Racetrack and Gaming Center.

In FY 2012 (the latest year for which these data are available), those six tracks accounted for 30 percent of greyhound performances, 17 percent of purses paid, and 15 percent of state taxes collected.⁵² In FY 2013, they accounted for 12 percent of total regular handle, 12 percent of on-track live handle, and 9 percent of inter-track wagering.⁵³

⁵¹ Florida PMW, Annual Report, FY 2012.

⁵² Spectrum analysis of PMW Annual Report FY 2012.

⁵³ PMW year-to-date activity report through June 2013, <http://www.myfloridalicense.com/dbpr/pmw/documents/Stats/HandleandCardroom2012-2013--2013-08-05--June--YTD.pdf>.

Jefferson County, Melbourne and Pensacola would cease live racing, track officials told Spectrum in our survey and in telephone interviews. The three tracks lost more than \$4 million in FY 2012 from their pari-mutuel operations, according to “uniform” financial reports submitted to PMW. They generated no inter-track wagering revenue as their racing product was not attractive enough for their signal to be carried by other Florida tracks.⁵⁴

Jefferson County already has stopped offering live racing, claiming it can no longer afford to operate in the current regulatory environment. Track officials say the State wants them to replace existing kennels, which animal rights activists say are inhumane. The track claims it is too expensive to replace the kennels. The track has, however, obtained a license to conduct live racing next year but does not plan on doing so unless the State changes its position on the kennels. By obtaining race dates for next year, Jefferson is keeping its options open in the event it is allowed to operate slot machines.⁵⁵

Ebro Greyhound Park, Mardi Gras Racetrack and Sarasota Kennel Club are unsure of what they might do should a decoupling bill pass. Their decision would, in part, be based on the type of decoupling legislation that is passed.

Would those facilities, for example, be able to continue to receive tax credits against tax on handle and sell them as they have in the past? How would the new law impact their simulcast and inter-track wagering operations? Would they have to pay more to the Florida host facility to receive races/games? What happens to the 4 percent levy on cardroom receipts that is currently used to boost purses? Would they continue to pay that 4 percent levy? Would that money be used to boost purses at the tracks that offer live racing? These are all policy decisions that the Legislature would need to address, and they will undoubtedly influence decoupling decisions of greyhound operators.

But it is our belief that Ebro, Mardi Gras and Sarasota would, in fact, cease live racing within three years. Should Mardi Gras not close, it would significantly reduce its live racing performances.

Three other greyhound tracks would stay open but reduce performances: Flagler by 33 percent, Naples by 50 percent, and Daytona by 10 percent.

Thus, the number of greyhound tracks that would either close or reduce performances would total nine. They accounted for 25 percent, or \$6.6 million of the \$26.4 million, in total purses paid in FY 2012. Some of those purses would be recaptured by the tracks that continue to operate. For example, track operators at Flagler and Naples-Fort Myers would be in a position to increase their average daily purses due to running fewer performances. And tracks such as Orange Park and Palm Beach Kennel Club could see an increase in simulcast wagering and inter-track wagering as well. Some of those increases should find their way into purse accounts. Those

⁵⁴ Spectrum analysis of PMW Annual Report FY 2012.

⁵⁵ Interview with Spectrum of Jefferson County Kennel Club management.

tracks still operating should see an increase in purses but, statewide, our estimate is that purses would decline by about 20 percent in the year after decoupling. This accounts for a recapture rate of 50 percent, which means that one-half of the lost purses, \$3.6 million, from the closures and performance reductions would be recovered at existing tracks.⁵⁶

The nine tracks accounted for 18 percent of total regular handle in FY 2012. Again, there would be a recapture rate for some of that lost handle. We assume a handle recapture rate of 50 percent.⁵⁷

The nine tracks accounted for 37 percent of performances. There would be little, if any, pickup of those lost performances by the tracks that would continue to operate, according to Spectrum research, as many of them are already operating year-round

Three top-tier greyhound tracks – Palm Beach Kennel Club, Orange Park Kennel Club and Derby Lane – expect to continue live racing and maintain the same level of performances. Sanford Orlando Kennel Club, which has no cardroom, would also continue to operate and would offer the same level of performances.

As we have noted, it is likely that the tracks that continue to operate would recapture some lost handle and purses, but it is our belief that whatever gains occur will be temporary. We base that conclusion on what happened in other states after greyhound tracks closed.

Phoenix Greyhound Park ceased live racing December 19, 2009, leaving Arizona with only one track, Tucson Greyhound Park. The total handle at Tucson declined in eight out of nine fiscal years leading up to 2009. From 2001 to 2009, handle fell from \$25.5 million to \$13.4 million, a decline of 52 percent. In 2008 and 2009, the decline was 24 percent and 18 percent, respectively. In FY 2010, Tucson had no competition for half of the year. Total handle increased 12 percent and another 6 percent the year after. In FY 2012, however, the numbers were almost identical.⁵⁸

In Texas, Gulf Greyhound Park appears to have benefited from the closure of Corpus Christi on December 30, 2007, and Valley Park in September 2009. Gulf averaged 16 percent year-over-year declines from CY 2002 to 2008. In CY 2009, Gulf's total handle increased fractionally and the year after, it decreased fractionally. In CY 2012, it sustained a 12 percent decline, which, again, suggests that the increases may be of a temporary nature.⁵⁹ Purses at Gulf

⁵⁶ Spectrum analysis of purses figures from PMW.

⁵⁷ Spectrum analysis of handle figures from PMW.

⁵⁸ Arizona Department of Racing annual reports; <http://www.azracing.gov/archives/annualReports.html>

⁵⁹ Texas Racing Commission annual reports; http://www.txrc.state.tx.us/agency/reports/AnnualRpt/annual_reports.php.

also showed significant declines prior to the closures, averaging 10 percent a year from 2001 to 2007. From 2008 to 2012, they averaged annual increases of 3 percent.⁶⁰

The Tucson and Gulf experiences appear to demonstrate that whatever increases occur may be temporary, and could level off after a few years.

Florida greyhound tracks themselves appear to have been impacted by the rash of greyhound track closings across the country. Carey Theil, executive director of GREY2K USA, has been reviewing Florida greyhound racing data for the past several years. His organization has been involved in a number of campaigns across the country to shut down greyhound racing on the grounds that it is inhumane. PMW annual reports show Florida greyhound handle sustained 13 consecutive years of significant handle declines, from FY 1992 to FY 2005. Handle fell from \$896.3 million to \$448.1 million. In FY 2006, handle increased by nearly 7 percent and then fell by just 3 percent the following year. Theil noted that between December 2004 and the spring of 2006, seven tracks across the country closed or ended live racing, a factor that may have been behind the FY increase in FY 2006 in Florida. But the stabilization of handle was short-lived as it fell 13 percent in FY 2007 and another 16 percent in FY 2008. During that two-year period, there were only two closings.

Theil believes the data show that the benefit that greyhound tracks receive from other track closings are only temporary, and that handle and purse declines will quickly resume. Theil and other observers say the declines will occur because the existing base of greyhound patrons may go to the closed track or off-track betting parlors to make simulcast bets, but as they lose interest or are no longer able to go, they are not being replaced by a new generation of bettors.

We believe that the impact of the greyhound closings on purses would mirror that of the impact on handle. The six greyhound tracks that we suspect would close accounted for 21 percent of purses paid (\$5.6 million) in FY 2012, according to the PMW annual report for that fiscal year. We would expect, based on our discussions with various stakeholders and industry experts, a recapture rate of roughly 50 percent, which means the existing facilities that continue to offer live racing would see their purses increase by \$2.8 million. Some of that increase would be due to higher simulcast fees. Again, though, as with handle, the greyhound increase in purses may be of a temporary nature. Within three to five years, we believe that purses would begin to decline to a level below that of when decoupling took effect, as interest in greyhound wagering would continue to wane.

As for the impact on breeding, Jack Cory, lobbyist for the Florida Greyhound Association, said the state would see significant decrease in breeding activity as a result of a drastic reduction in performances. Cory argues that decoupling would be “devastating to the State of Florida and the entire pari-mutuel industry.”

⁶⁰ Ibid.

He said the motivation for it is to eliminate live greyhound racing so the tracks can become casinos. Cory said track operators should take the casino issue to the voters rather than attempt to become casinos through decoupling.

Cory said that the greyhound sector accounts for so much of pari-mutuel activity in Florida that taking steps to force its demise would have far-reaching impacts. Eliminating live racing would result in such a reduction that it would threaten the “viability of the greyhound industry,” according to Cory, who believes there is a market for greyhound racing and that any operator who wants to close should do so, but the State should then put its permit out to bid. He argues that there will be companies willing to step forward and acquire those racing permits which, for the most part, come with the ability to offer a cardroom and simulcasting.

Tax credits are unique to greyhound racing. The credits reduce an operator’s tax obligation to the State. In FY 2013, they totaled \$12.3 million. The credits are one reason why State revenue from the greyhound sector is so small. They can be used toward taxes incurred on handle and daily license fees. And if one track cannot utilize all of the credits, it can sell them to another. More than \$2 million in credits were purchased by other tracks in FY 2013.⁶¹

PMW does not, and could not, break out regulatory costs by sector. We endeavored on our own to estimate regulatory costs for the greyhound sector. Greyhound racing accounted for 73 percent of live performances, 48 percent of live handle, 32 percent of occupational licenses and 57 percent of all pari-mutuel facilities in FY 2012, according to PMW. (2012 was the most recent year for which data were available.) We believe that we could conservatively assign half of the PMW operating budget to greyhound racing. That would mean it costs the state \$4.1 million to regulate greyhound racing. The total tax revenue collected from greyhound racing was \$3.1 million in FY 2012,⁶² resulting in a deficit of \$1 million. And that deficit would be considerably greater if PMW non-operating expenses of \$4.6 million⁶³ were allocated to the greyhound sector. Those non-operating expenses include fingerprinting, administrative overhead and a service charge to the general revenue fund. If we again allocated half of the non-operating expenses to greyhound racing, the deficit would increase to \$3.3 million.

We note that some of the greyhound tracks that would close generated very little State revenue. Melbourne paid just \$9,220 in state taxes, Ebro \$21,545, and Jefferson County \$93,504.⁶⁴ That *de minimis* revenue clearly was not enough to cover the costs of regulating those facilities. Thus, their closures could be a net gain for the State treasury.

⁶¹ Division of Pari-Mutuel Wagering, custom report

⁶² Division of Pari-Mutuel Wagering, 2012 Annual Report

⁶³ Division of Pari-Mutuel Wagering

⁶⁴ Ibid.

e. Impact Summary

Modifying or repealing live racing requirements would not impact revenue sharing per the Seminole Compact. We also see no impact on cardroom and/or slot revenue, as operators have indicated they see, little if any, crossover play from gamblers who wager on pari-mutuels.

Breeders, trainers, jockeys and players would be impacted by any reductions in the number of live performances.

The following tables provide Spectrum’s estimates of the impacts of decoupling, based on our research, survey responses and analysis.

Figure 17: Florida FY 2013 statewide handle by sector and Spectrum estimate of decoupling impact

	FY 2013 statewide handle (M)	Spectrum estimate with decoupling (M)	Change
Greyhound racing	\$258.09	\$234.86	-9.0%
Jai alai	\$26.67	\$21.87	-18.0%
Thoroughbred racing	\$538.65	\$538.65	0.0%
Quarter-horse racing	\$1.48	\$1.48	0.0%
Harness racing	\$47.37	\$35.53	-25.0%
Total	\$872.26	\$832.39	-4.6%

Source: Florida Division of Pari-Mutuel Wagering, Spectrum Gaming Group

Figure 18: Florida FY 2013 statewide purses by sector and Spectrum estimate of decoupling impact

FY 2013	Total Statewide Purses/Player Awards	Purses paid by the facilities we expect to close or significantly reduce performances	Percent of purses those facilities accounted for	Expected increase from recaptured purses at facilities that continue to operate (assume 50%)	Net purse reduction	Percent decline in total purses offered
Greyhound racing	\$26,377,707	\$5,595,482.00	21%	\$2,797,741	\$2,797,741.00	-11%
Jai alai	\$5,079,995	\$381,241.00	8%	\$ -	\$381,241.00	-8%
Quarter horse racing	\$4,055,567	\$202,653	5%	\$ -	\$202,653.00	-8%
Harness racing*	\$7,370,992	\$7,370,992.00	100%	\$3,685,496	\$3,685,496.00	-8%
Thoroughbred racing	\$81,122,005	<i>No impact</i>				

Source: Florida Division of Pari-Mutuel Wagering, Spectrum Gaming Group. *Estimate a reduction in performances and purses of 50 percent

Figure 19: Florida FY 2013 facilities offering live events and Spectrum estimate of decoupling impact

	No. facilities offering live events FY 2013	Spectrum estimate with decoupling
Greyhound racing	13	7
Jai alai	6	3
Thoroughbred racing	3	3
Quarter-horse racing	2	1
Harness racing	1	1
Total	25	15

Source: Florida Division of Pari-Mutuel Wagering, Spectrum Gaming Group

Scenario E: Changing Tax Rates for Class III Games at Pari-Mutuels

The current tax on slot revenue (or “revenue due the State”) at pari-mutuels is 35 percent. However, this tax is applicable to net slot revenue (i.e., net of promotional credits and unclaimed tickets), and the effective tax rate on gross slot revenue for FY 2013 was 30.4 percent (\$152.5 million in revenue due to the State from GGR of \$501.3 million, of which \$435.8 million was net slot revenue).

Based on actual slot revenue at the six pari-mutuels with slots for FY 2013 (and assuming that any change in effective tax rate has a perfectly inelastic outcome):

- A 1 percentage-point change in the tax on slot revenue is valued at \$4.36 million (i.e., increasing the tax rate to 36 percent, or decreasing it to 34 percent, would either increase revenue due to the State by \$4.36 million or decrease it by \$4.36 million, respectively).
- A 5 percentage-point change in the tax on slot revenue is valued at \$21.8 million annually (i.e., increasing the tax rate to 40 percent, or decreasing it to 30 percent, would either increase revenue due to the State by \$21.8 million or decrease it by \$21.8 million, respectively).

Under Scenario A (the casino landscape reflecting current law/current administration, while the banked card provisions of the Seminole Compact are renewed for an additional 15 years and the Compact is not otherwise amended), we project the eight pari-mutuels with slot machines would generate \$607.8 million of gross slot revenue, with net slot revenue of \$547 million, which would result in revenue due to the State of \$191.4 million. However, any deviation in slot revenue and/or the effective tax rate could impact revenue due to the State, as we illustrate in the following table.

Figure 20: Scenario E – Effect of changing tax rates for Class III games at pari-mutuels

Scenarios - revenue due to the State (\$M)		Effective Tax Rate (on Net Slot Rev.)						
		20%	25%	30%	35%	40%	45%	50%
Gross Slot Rev. (\$M)	\$516.6	\$93.0	\$116.2	\$139.5	\$162.7	\$186.0	\$209.2	\$232.5
	\$547.0	\$98.5	\$123.1	\$147.7	\$172.3	\$196.9	\$221.5	\$246.1
	\$577.4	\$103.9	\$129.9	\$155.9	\$181.9	\$207.9	\$233.8	\$259.8
	\$607.8	\$109.4	\$136.7	\$164.1	\$191.4	\$218.8	\$246.1	\$273.5
	\$638.1	\$114.9	\$143.6	\$172.3	\$201.0	\$229.7	\$258.5	\$287.2
	\$668.5	\$120.3	\$150.4	\$180.5	\$210.6	\$240.7	\$270.8	\$300.8
	\$698.9	\$125.8	\$157.3	\$188.7	\$220.2	\$251.6	\$283.1	\$314.5

Source: Spectrum Gaming Group

From this illustrative figure, each change in gross slot revenue is expressed in ± 5 percent increments to our projected level (of \$607.8 million), from 85 percent to 115 percent of this value, while each change in effective tax rate is expressed in ± 5 percentage-point increments (between 20 percent and 50 percent). We further assume net slot revenue (the taxable base) is 90 percent of gross slot revenue under all scenarios.

As illustrated, each 5 percentage-point deviation in the effective tax rate equates to \$27.3 million in revenue due to the State, all other things being equal. However, if a 15 percentage-point increase in effective tax rate (i.e., increased to 50 percent) were to result in a 15 percent decrease in slot revenue (due, perhaps, to fewer dollars available for marketing or facility upkeep/improvements), then total revenue due to the State would increase by 21.4 percent (or one-half of the increase in effective tax rate). Conversely, if a 15 percentage-point decrease in effective tax rate (i.e., decreased to 20 percent) were to result in a 15 percent increase in slot revenue (due, perhaps, to greater marketing power or facility expansion/improvements), then total revenue due to the State would decrease by 34.3 percent (or by 80 percent of the decrease in effective tax rate).

In addition to the tax on slot revenue, each pari-mutuel location having slot machines is subject to annually recurring license fee of \$2 million and a regulatory fee of \$250,000. From an operator's standpoint, these two aforementioned fees amounted to 3.1 percent of net slot revenue during FY 2013 (and 2.7 percent of total GGR over the same period). In the context of this discussion, we assume these taxes/fees do not change.

Moreover, under this example (i.e., reflecting current law/current administration) any changes in effective tax rates applicable to pari-mutuels with slots in Miami-Dade and Broward counties would not result in any impact on the Seminole Compact.

1. Implications and Considerations

Changing tax rates at pari-mutuels would not impact revenue sharing per the Seminole Compact.

Increasing tax rates on pari-mutuel slot revenues most likely would reduce operating margins at a time when the Seminole Tribe is expanding and improving its operations in South

Florida, thus risking deterioration of the pari-mutuels' competitiveness. The increased tax receipts could offset potentially lower gaming revenues in the short run but could leave the operators at a competitive disadvantage in the long run (or, at worst, could create a situation where one, or some, are no longer economically viable operations and potentially cease operations).

On the other hand, decreasing tax rates would assist in protecting operating margins, allowing for greater marketing reinvestment and facilities improvements, leading to greater revenues. The decreased tax receipts could be offset by higher gaming revenues. However, as we note later in the report, lowering the tax rate creates an additional risk for the State if operators view the lower taxes as a new revenue stream that can be invested outside of Florida. Any such consideration of a lower tax rate could include a commitment from operators to reinvest any additional funds in their Florida facilities.

If the State desires to grow, or at least maintain, its tax receipts from gaming facilities, the operators must be in a position to market effectively and reinvest in their properties to keep them fresh and attractive to patrons. Properties that cannot spend adequately on marketing and facilities risk being caught in a vicious cycle that results in lower employment and tax receipts.

2. Economic Well-Being of Existing Industry and Stakeholders

The following analysis shows a macro-based, illustrative presentation of an average Florida racino and the potential impact to both earnings before interest, taxes, depreciation and amortization (EBITDA) and number of employees based on changes to GGR and/or effective tax rate (where our overarching assumption is that a material change in effective tax rate could spur these changes in GGR).

In FY 2013, Florida's six racinos had total GGR of \$501.3 million – or an average of \$83.6 million in GGR per racino. As of year-end 2012, the six Florida racinos collectively had 3,319 employees – or an average of 553 employees per racino in both gaming-related and non-gaming capacities.⁶⁵ Therefore, within our illustrative presentation, for an average Florida racino at status-quo, we assume annual GGR of \$83.6 million and 553 employees.

We further assume this racino has annual EBITDA of \$12.2 million. The EBITDA assumption is based on 25 percent of GGR net of promotional allowances (assumed at 10 percent) and less revenue due to the state (at 35 percent of net GGR). This implies annual operating expenses for this average racino of \$36.7 million annually.

We show GGR changes in 10 percentage-point intervals (i.e., a range of in GGR from 80 percent to 120 percent of average GGR) and changes to the effective tax rate in 5 percentage-point intervals (i.e., a range in effective tax rate of 25 percent to 45 percent).

⁶⁵ 2013 *State of the States*. American Gaming Association.

In our experience, a percentage decline (or improvement) in revenue (GGR and net GGR) may not have a 1:1 impact in the percentage decrease (or increase) in associated operating expenses and/or employment levels).⁶⁶ Therefore, in our illustrative presentation we assume this average racino’s operating expenses and employment levels would change by one-half the amount of the change in net GGR (compared to status-quo). The following table shows resultant net GGR, as well as percentage change in such from status quo (and for our assumed average Florida racino).

Figure 21: Average Florida racino – net GGR with change in effective tax rate

Net GGR*		Change in GGR				
		(20.0%)	(10.0%)	0.0%	10.0%	20.0%
Effective Tax Rate	25%	\$45.1	\$50.8	\$56.4	\$62.0	\$67.7
	30%	\$42.1	\$47.4	\$52.6	\$57.9	\$63.2
	35%	\$39.1	\$44.0	\$48.9	\$53.8	\$58.7
	40%	\$36.1	\$40.6	\$45.1	\$49.6	\$54.1
	45%	\$33.1	\$37.2	\$41.4	\$45.5	\$49.6
	Resultant Change in Net GGR					
	25%	(7.7%)	3.8%	15.4%	26.9%	38.5%
	30%	(13.8%)	(3.1%)	7.7%	18.5%	29.2%
	35%	(20.0%)	(10.0%)	0.0%	10.0%	20.0%
	40%	(26.2%)	(16.9%)	(7.7%)	1.5%	10.8%
45%	(32.3%)	(23.8%)	(15.4%)	(6.9%)	1.5%	

* Net of both Promotional Allowances and Gaming Tax.

Source: Spectrum Gaming Group

The following table shows resultant EBITDA from any of the combination of changes in GGR and effective gaming tax rate (and for our assumed average Florida racino).

Figure 22: Average Florida racino – example of EBITDA with change in effective tax rate

EBITDA		Change in GGR				
		(20.0%)	(10.0%)	0.0%	10.0%	20.0%
Effective Tax Rate	25%	\$9.9	\$13.4	\$16.9	\$20.4	\$24.0
	30%	\$8.0	\$11.3	\$14.6	\$17.9	\$21.1
	35%	\$6.1	\$9.2	\$12.2	\$15.3	\$18.3
	40%	\$4.2	\$7.0	\$9.9	\$12.7	\$15.5
	45%	\$2.3	\$4.9	\$7.5	\$10.1	\$12.7

Source: Spectrum Gaming Group

The following table shows resultant employment levels from any of the combination of changes in GGR and effective gaming tax rate (and for our assumed average Florida racino).

⁶⁶ For example, while GGR at Atlantic City’s casinos decreased by 41.5 percent since between 2006 and 2012 (where 2006 was historical peak of GGR), direct employment levels have fallen by 21.3 percent when comparing these periods (or by nearly one-half of the GGR decrease).

Figure 23: Average Florida racino – example of employment levels with change in effective tax rate

Employment		Change in GGR				
		(20.0%)	(10.0%)	0.0%	10.0%	20.0%
Effective Tax Rate	25%	531	563	595	627	659
	30%	514	544	574	604	633
	35%	497	525	553	580	608
	40%	480	506	531	557	582
	45%	463	487	510	533	557

Source: Spectrum Gaming Group.

It is important to note that this illustrative racino does not necessarily go from profitable to unprofitable as we shift scenarios. However, there could be a host of ramifications (both financial and social to both private and public stakeholders [and local communities]) that could occur with any material changes in GGR at any racinos in Florida (and changes that could be spurred by material changes to the effective gaming tax rate, as illustrated in this hypothetical example).

As illustrated, our average Florida racino that has EBITDA of \$12.2 million annually at status quo (on GGR of revenue of \$83.3 million) and has 553 employees could see these levels deteriorate with any increase in the effective gaming tax rate that then yields a negative impact to GGR. However, it is not only the operator and employees that may suffer with a downturn in GGR. Revenue due to the state from slot operations at Florida's racinos goes to the Department of Education; while the racino facility then also may have less money to offer a compelling, or competitive, offering (as there becomes less available for maintenance and/or capital expenditures, such as new products/offering). Arguably, any decrease in GGR would also threaten the viability of the associated racetrack operation, as well as the host community and general area (i.e., employment losses and a much less stable [or not viable] racino and racetrack operation).

Also, when faced with actual or potential declines in GGR a racino operator may choose to increase promotional offerings to compete against each other and with Native American casinos (that are not subject to the same effective tax rate), then there becomes less money available to do so (unless equivalent cost savings can be realized elsewhere, which may be reducing employees). Furthermore, if the increase in promotional offerings are not offset by respective increases in revenue, then operating expenses are impacted and this can further erode profitability.

Taking into consideration the above and noting that any analysis of the macroeconomic effects of tax policy changes is hugely dependent on the microeconomic effects, we present an illustrative example of the economic and fiscal effects of changing tax rates below. Put simply, this example shows the impacts of adjusting *only* the tax rate relative the Baseline scenario. As noted elsewhere, the impacted industries are amusement, gambling, and recreation and accommodations. The behavior of these industries in light of a tax change will skew closer to the behavior of the aggregate sector rather than specifically a pari-mutuel operation or resort casino. It is our interpretation that these results form the top and bottom bounds of the likely effects.

The shape of the results is determined by whether the simulation represents an increase or decrease in tax rates. The US median rates are currently 27 percent and thus lower than Florida's prevailing rate of 35 percent. In this scenario, employment first falls then increases over the Baseline. The initial loss is due the reduction of government spending while the increase over time is due to the growth of gaming establishments that are now facing lower costs of doing business. The Pennsylvania tax rates are currently higher than Florida's so the behavior in this scenario is the opposite of what we see in the US median scenario. Here employment first rises with government spending but slowly falls as gaming establishments face higher costs.

Figure 24: Scenario E, changing tax rates – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	-509	-364	-200	-71	26	105
Gross State Product	(\$37)	(\$26)	(\$13)	(\$1)	\$10	\$17
Gaming Taxes	(\$23.31)	(\$48.92)	(\$52.00)	(\$53.61)	(\$55.30)	(\$57.04)
Sales/Use Tax	(\$0.42)	(\$0.79)	(\$0.68)	(\$0.52)	(\$0.38)	(\$0.26)
Lottery	\$0.83	\$1.77	\$1.84	\$1.85	\$1.86	\$1.87
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	(\$0.37)	(\$0.77)	(\$0.70)	(\$0.57)	(\$0.46)	(\$0.35)
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	165	207	240	272	-71	
Gross State Product	\$25	\$32	\$37	\$42	(\$1)	
Gaming Taxes	(\$58.79)	(\$60.52)	(\$62.24)	(\$63.95)	(\$53.61)	
Sales/Use Tax	(\$0.14)	(\$0.04)	\$0.05	\$0.15	(\$0.52)	
Lottery	\$1.89	\$1.91	\$1.92	\$1.92	\$1.85	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	(\$0.23)	(\$0.13)	(\$0.03)	\$0.07	(\$0.57)	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 25: Scenario E, changing tax rates – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	1,211	863	480	174	-63	-243
Gross State Product	\$89	\$62	\$29	\$2	(\$22)	(\$42)
Gaming Taxes	\$55.36	\$116.18	\$123.49	\$127.32	\$131.33	\$135.46
Sales/Use Tax	\$0.99	\$1.88	\$1.61	\$1.25	\$0.91	\$0.61
Lottery	(\$1.97)	(\$4.19)	(\$4.35)	(\$4.37)	(\$4.40)	(\$4.43)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	\$0.89	\$1.81	\$1.66	\$1.36	\$1.08	\$0.78
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	-380	-481	-558	-622	174	
Gross State Product	(\$59)	(\$73)	(\$86)	(\$99)	\$2	
Gaming Taxes	\$139.61	\$143.73	\$147.82	\$151.88	\$127.32	
Sales/Use Tax	\$0.34	\$0.10	(\$0.13)	(\$0.34)	\$1.25	
Lottery	(\$4.47)	(\$4.50)	(\$4.52)	(\$4.53)	(\$4.37)	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	\$0.52	\$0.26	\$0.04	(\$0.19)	\$1.36	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Scenario F: Adjusting Restrictions on Slots in Broward/Miami-Dade

In this section, we focus on two key restrictions:

- Adjusting limits on the number of machines
- Adjusting limits on the hours of operation

A pari-mutuel slot operation Florida is currently limited to 2,000 machines. Additionally, slot gaming areas may operate daily throughout the year, and slot machine gaming areas can be open for a cumulative amount of 18 hours Monday through Friday and 24 hours Saturday, Sunday and some holidays.

It is critically important to note that none of the existing six pari-mutuel slot operations is near the 2,000-machine maximum. As of June 30, 2013, the range in number of slot machines was 801 to 1,432, with the average being 1,068. The licensee with the most slots (Isle Casino Racing at Pompano Park) had only 1,432, or 71.6 percent of the maximum allowed.

1. Adjusting Limits on the Number of Slot Machines

Several states impose a variety of restrictions on the size – or potential size – of their gaming industry. Such restrictions can range from limiting the number of gaming positions (Pennsylvania and Illinois) to restricting the maximum size of the casino floor (New Jersey) to

imposing other requirements, such as requiring casinos that float on water, which is designed to essentially have the same limiting effect. Such limitations, in our experience, are based on the view that such restrictions are in the public interest, in that allowing the laws of supply and demand to be unfettered would result in a casino industry that would be too large to control or too dominant in a local economy.

To some degree, such restrictions work. A successful riverboat, for example, has few options if it cannot meet the demand in its market. In some markets, most notably Illinois, the restrictions on the number of positions – limiting the supply – can distort the relationship between supply and demand.

Current Illinois law limits casinos to no more than 1,200 gaming positions. Operators have the flexibility within that limit to alter the mix of slots, as per a formula developed by the Illinois Gaming Board, in which one slot machine = 0.9 positions, one craps table = 10 positions, and one non-craps table game = 5 positions.⁶⁷ That limitation has created distortions in the market.

In FY 2013, the Rivers Casino in Des Plaines, which serves the Chicagoland market, reported daily GGR per slot machine at \$804. That is almost twice the daily win per unit reported by its closest competitor, Harrah's Joliet (located in a less-populous region of the same market) at \$426. To put those numbers in perspective, we note that all the racinos in Florida reported a collective daily win per unit of \$215 over the same 12-month period.

Spectrum has developed broad-based modeling over the years that assumes slot players, on average, lose money at a rate of 80 cents per minute, or \$48 per hour. By that ratio, the Rivers slots are being played 17 hours per day, every day of the year. In such a situation, Rivers – as well as Harrah's Joliet – would benefit if they were able to add supply.

Such a distorted level of daily win per unit indicates that certain phenomena are occurring:

- At peak periods, such as Saturday nights, it is likely that every gaming position is occupied, thus forcing players to wait, or in some cases, to play machines or games other than their favorites.
- The gaming experience for many players is less satisfying than it otherwise would be, as they often have to elbow their way to machines or play games that are not their first choice.

⁶⁷ Spectrum Gaming Group, "Market Analysis/Impacts Report: Projected Gross Gaming Revenue, Employment, and Macro Economic Impacts of Expanded Casino Gambling in Illinois, March 2, 2012, p. 9 <http://illinoisjobsalliance.org/wp-content/uploads/2012/04/Spectrum-Gaming-Group-Report-for-Illinois-Revenue-and-Jobs-Alliance.pdf>

- To some unknown degree, a number of adults who would otherwise visit a casino during peak or near-peak periods are more likely to stay away or choose an alternate entertainment option.

That is not the situation in Florida. Our assessment of the situation in Florida, based largely on the current daily win per unit, is that Florida operators believe patron demand does not justify adding more slots. Based on current performance levels, Spectrum believes that any increase in the 2,000-slot limit would have no impact on the market.

Casino management must carefully weigh decisions regarding the purchases of slot machines. Each machine costs, on average, about \$18,000, which does not take into account any additional construction cost that may be necessary for space to add the games. Other factors weigh on such decisions as well, including regulatory and legislative uncertainty. For example, racino operators will be less likely to invest in additional supply if they fear that the competitive landscape may become more intense in coming years.

We also explored this issue from the standpoint of slot suppliers, who collectively are represented by the Association of Gaming Equipment Manufacturers (“AGEM”), a Las Vegas-based trade group. AGEM noted the following:

At the outset, AGEM found that Florida, for the most part, has been reasonably progressive in an easing of some of the regulatory burdens that existed when Florida initially became a commercial slot machine jurisdiction. From an employment and capital facilities standpoint, all of AGEM members that sell slot machines and gaming equipment in Florida maintain a presence in the state, with offices and distribution locations staffed mostly with sales and service personnel. The sales teams are responsible for maintaining relationships with all of the gaming locations in the state, while service personnel are responsible for ensuring machines and other technology have maximum “up time” while conforming to the proper technical standards and regulations present in the state. Furthermore, several of the suppliers also use their Florida operations as a hub for further distribution into gaming markets in the cruise ship, tribal, Caribbean and Latin/Central American markets.

The exact investment in offices and staffing is not readily obtainable, and our members are hesitant to try and identify any statutory or regulatory changes that would directly impact decisions to expand capital facilities or increase employment. Members instead indicated that such decisions will be driven as an indirect result of general market growth and expansion in Florida. Increases in the number of properties and the number of gaming positions in Florida will essentially drive, on a company-by-company basis, the decisions to potentially expand offices and staffing in the state.

Additionally, AGEM identified four broad areas that its members cite as opportunities to increase supplier investment and employment in Florida, although those members could not quantify either:

- Clarify statutory and regulatory standards for suppliers.

- Provide an exemption to the public records law that would allow suppliers to protect sensitive, proprietary information.
- Adopt shipping and related oversight procedures for slot machine regulation that are common in other jurisdiction.
- Allow operators to offer wide-area progressive⁶⁸ slot jackpot systems among properties, which AGEM suggests could increase revenue by 20 percent to 40 percent for machines linked to such a system.^{69 70}

2. Adjusting Limits on the Hours of Operation

With respect to operating hours, our extensive knowledge and experience within the casino gaming industry indicate that increasing the number of hours (i.e., beyond 18 hours during midweek days) would not have a material impact on GGR.

This conclusion is supported by an analysis of a similar situation faced by the casino industry more than 20 years ago in New Jersey, where casinos are geographically limited to Atlantic City. Prior to 1991, the New Jersey Casino Control Act limited gaming hours: Casino floors had to close at 4 a.m. on weekdays and 6 a.m. on weekends and holidays, and were allowed to reopen at 10 a.m. That statute was later amended, first in June 1991 to allow the Casino Control Commission to authorize 24-hour gambling on weekends, holidays and designated “special events.” In May 1992, the Act was amended again to give the commission full authority to set gaming hours. That month, the industry’s trade group began an intense lobbying effort to secure 24-hour casinos. Among the promises made by the industry at that time were that 24-hour gambling would:

- Create 1,200 additional full-time-equivalent jobs.
- Generate additional annual gaming revenue of between \$90 million and \$105 million (which would have equated to roughly a 3.5 percent increase).
- Increase annual vendor purchases and non-gaming revenues by between \$6 million and \$10 million each.
- Improve the ability of casinos to implement marketing programs and to schedule employees.
- Make life easier on employees, many of whom would enjoy more regular working hours.⁷¹

⁶⁸ Wide-area systems link progressive slot jackpots among multiple properties.

⁶⁹ Letter to Spectrum Gaming Group from AGEM Executive Director Marcus Prater, Aug. 28, 2013

⁷⁰ Wide-area progressives are electronically linked slot machines, offering large, progressive jackpots to customers in many related or non-related gaming locations, simultaneously.

The linkage between expanded gaming hours and most of these projections would be difficult to measure, as so many factors come into play. However, some of these projections fell short. Employment – which was about 44,000 at the time – did not rise, and a decade later, still hovered around the same mark. Today, 22 years later, the industry employs only 35,000, although multiple macro and micro factors have contributed to that decline.

Other projections, however, made sense. Round-the-clock scheduling is easier to implement than a series of disjointed shifts. And certainly, resorts that do not offer 24-hour gaming could be at a disadvantage when competing against round-the-clock destinations, as would be the case of Florida racinos vs. the Seminole casinos.

At the same time, however, extended gaming hours might have had some immediate successes. In its May 29, 1992, petition to the New Jersey Casino Control Commission, the Casino Association of New Jersey wrote: “During the second half of 1991, 24-hour gaming was the key factor which turned a declining year (1st half) into an acceptable year (2nd half). Twenty-four hour gaming halted the decline in gross revenues, and stimulated a year-end increase. It contributed to the end of a layoff cycle, as casinos began to re-employ individuals in the summer and 2nd half. Twenty-four hour gaming produced more tax revenues during the latter half of the year and stimulated more private-sector purchases of goods and services. It contributed to increases in operating income for most properties.”⁷²

We selected a comparison of the years 1991 and 1993 in an effort to isolate the impacts of 24-hour gambling. No significant capacity came into the market during this time, yet the hours of operation changed significantly during that period. In 1991, Atlantic City still had limited hours (although 24-hour gambling was allowed on weekends and holidays during the second half), while 1993 offered non-stop gambling.

At the same time, there is no evidence in Atlantic City that the positive impact from expanding hours was compounded from year to year. Overall growth rates did not begin to climb dramatically after 1993, and our analysis suggests that growth rates in the 1980s – a decade of limited hours – were far higher (although significant increases in capacity during that time makes comparisons difficult).

⁷¹ Petition 150201, filed by Casino Association of New Jersey with New Jersey Casino Control Commission, May 29, 1992.

⁷² Ibid.

Figure 26: New Jersey casinos before and after 24-hour gaming

	1991	1993	Change
Casino revenue (in millions)	\$2,991	\$3,301	10%
Gross operating profit (in millions)	\$716	\$836	17%
no. of employees	43,910	44,111	0.5%
square footage	774,000	797,155	3%
no. of hotel rooms	9,489	8,946	-6%
GOP margin	23.9%	25.3%	1.4%
Revenue per square foot	\$3,864	\$4,141	7%
Revenue per employee	\$68,117	\$74,834	10%
Revenue per hotel room	\$315,207	\$368,992	17%

Source: New Jersey Casino Control Commission, Spectrum Gaming Group

The following table attempts to isolate the impact of 24-hour gambling by examining the compound annual growth period for three separate periods: 1992-1997, 1993-1997 and 1991-1996. These were generally healthy stretches for Atlantic City, with steady growth in revenue. The commencement of round-the-clock gambling in the spring of 1992 might have had a small impact during the initial period, but that impact would be diluted over a broader stretch of time. For the period of 1993-1997, hours did not change and would have had no impact. Once we determined the compound annual growth rate (“CAGR”) for these three periods, we applied them to the base year of 1991. Any growth over and above the CAGR would be credited to the increased hours of operations.

Figure 27: Compound annual growth rate of New Jersey casinos before and after 24-hour gaming

	CAGR	1993 adj. revenue based on CAGR	Growth attributable to 24-hour gaming	Pct. Over base year revenue	Annualized growth
CAGR, 1992-1997	3.3%	\$3,194.49	\$106.51	3.6%	1.7%
CAGR, 1991-1996	4.2%	\$3,247.00	\$54.00	1.8%	0.9%
CAGR, 1993-1997	3.5%	\$3,203.35	\$97.65	3.3%	1.3%

Source: New Jersey Casino Control Commission, Spectrum Gaming Group

The above table demonstrates that the period of 1992-1997 offered the most favorable scenario as to the positive impact of 24-hour gambling. This period had the lowest base CAGR, which would mean any additional growth, would be magnified.

This scenario attributes an annual growth in revenue of 1.7 percent to the hours of operation. Looking at all three scenarios, it is clear that extending hours may only grow GGR by less than 2 percent, which may not a material factor for existing operators.

So, although extending hours would be an industry-friendly move by the State, its impact would be small and would vary by property. Some might even lose money by extending hours (as any incremental GGR resulting from adding hours of operations may be outweighed by associated increases in operating expenses).

At the same time, we note that the original rationale in most states for limiting the hours of operation was to give gamblers a break, to ensure that they took a forced respite. We can identify no way to quantify whether such respites are effective.

3. Implications and Considerations

Increasing the hours of operation and/or allowing existing pari-mutuels in Broward and Miami-Dade counties to have more than 2,000 slot machines would not impact revenue sharing per the Seminole Compact.

On the surface, increasing the maximum slot units per facility or amending the current regulations for the hours of operation – or both – will have no material positive impact on revenues and overall operating performance, based on the discussion above. Requiring the facilities to expand the number of units or hours, in Spectrum’s opinion, would have negative consequences due to higher operating costs without a corresponding increase in revenue.

However, from a fiscal perspective (and as a purely hypothetical example), if pari-mutuels with slots in Miami-Dade and/or Broward counties were to materially increase their respective number of slot machines (or undergo any material changes, such as increasing size, scope, amenities, etc.), this could result in increases in revenue due to the State resulting from incremental increases in slot revenue. It is our understanding (under this defined scenario) that any such changes that would be limited to pari-mutuels in Miami-Dade and Broward counties (and limited to slot activities) and would not result in any impact on the Seminole Compact.

For example, if any (or all) of the eight pari-mutuels with slots in Miami-Dade and Broward counties (inclusive of Dania Jai-Alai) were to increase to 2,000 slots, or more, per location, this would alter the competitive landscape (assuming the Seminole casinos and Miccosukee casino do not materially alter their respective casino capacities and/or scope of operations). Under current law/current administration (and the Baseline scenario), the eight pari-mutuels in Miami-Dade and Broward counties have 8,409 slot machines, representing 51.6 percent of all slots in the two counties (assuming Native American operators have a total of 7,877 slots in the two counties). However, if we assume the pari-mutuels all maximize their slots (at 16,000 in total, or 2,000 per location), that would mean that pari-mutuels would then have 67 percent of all gaming positions in the two counties (again, assuming Native American operators maintain same level of slots operating in the two counties). In this hypothetical example, such a move could yield a shift in GGR (amongst the casinos), and any GGR diverted from Native American operators to pari-mutuel operators would then be subject to the effective gaming tax, which would benefit the State, while any new (induced) GGR generated as a result of slot expansion at pari-mutuels also would serve to increase revenue due to the State.

Scenario G: Authorizing Slots at Pari-Mutuels Statewide

The salient assumption under this scenario is that there could be 20 pari-mutuel locations statewide outside of Broward and Miami-Dade counties that could offer slot machines.

Currently, of the existing 15 casinos in Florida (and also with 16 casinos, inclusive of Dania Jai-Alai), 56 percent of Florida adults are within a one-hour drive of a Florida casino, while 81.4 percent are within a two-hour drive. However, with 20 additional pari-mutuel casinos throughout Florida (assuming all are viable and at their current locations), 97.1 percent of Florida adults would be within a one-hour drive of an in-state casino, while nearly all Florida adults (at 99.8 percent) would be within a two-hour drive. To put it another way, nearly 6 million more Florida adults would be within a one-hour drive of a Florida casino under such expansion (from 8.1 million adults currently to 14.1 million adults with 36 casinos statewide).

Under this casino expansion scenario, up to 23 of the 67 counties in Florida could have one or more casinos.

Currently, there are no out-of-state adults (i.e., non-Floridians) within a one- or two-hour drive of an existing Florida casino. However, under this aforementioned expansion scenario, there would be 394,000 out-of-state adults (from Alabama and Georgia) within a one-hour drive of a Florida casino, while there would be 1.67 million out-of-state adults (adding Mississippi) within a two-hour drive.

Once both Hialeah Park and Dania Jai-Alai are operational with an assumed 1,000 slot machines apiece, we estimate there will be 22,973 slot machines and 344 table games (and 25,037 gaming positions) at 16 casinos in Florida. If each of the 20 pari-mutuels outside of Miami-Dade and Broward counties were to add 2,000 slots per location (the maximum allowed under our assumption set, as well as per current law/current administration), a total of 40,000 slot machines would be added to pari-mutuels in 18 counties, while 16 of these counties do not currently have a casino. However, we do not believe that all 20 pari-mutuels would add 2,000 slots, as some would warrant considerably fewer slots, and we believe some locations would not even be economically viable (per our assumption set, as each location would require a minimum of 500 slots having at least \$200+ in average win per gaming position per day).

1. Implications and Considerations

It is our understanding that if this scenario were implemented, all revenue sharing per the Seminole Compact would end. However, adopting this scenario could result in incremental increases in revenue due to the State, as well as incremental jobs and license fees, from development of casinos at pari-mutuel locations statewide.

The revenue generated by slot machines could provide a valuable funding source for racing purses and improved racing facilities, if operators were required to supplement purses, as demonstrated with the South Florida racinos and in other racino states. This could in turn enable the host pari-mutuel facilities to attract more and higher-quality horses and jockeys (and

greyhounds), which would flow through to benefit trainers and breeders. However – as results in other racino states have shown – a higher-quality racing product does not necessarily translate into higher live handle or increased attendance or popularity for the racing industry, as this activity is in decline nationwide.

As noted in Chapter I[E][3], the addition of slot machines may positively impact cardroom revenues. Further, the capital improvements required to add slot machines may require, or at least encourage, the track to simultaneously upgrade its cardroom, which could make it more popular with patrons.

Additionally, the State may want to examine issues of saturation in certain areas throughout Florida. As such, some existing operators could face revenue declines, which could in turn lead to deterioration of profitability and related operating margins. Material reductions to profitability and operating margins may result in a gaming offering not consistent with the quality of other tourist-related attractions in the State.

Having gaming facilities throughout the state could impact Florida's family-friendly image in that travelers could be continually exposed to advertisements and other marketing materials for one or more slots locations. As we noted in detail in our first report, Part 1-A, many Florida business leaders, particularly in the Orlando area, fear that the family-related tourism brand that has worked well in Orlando and other regions could be jeopardized by any perceived shift to more gaming-oriented themes.

The scale of such expansion would add logistical concerns regarding the cost of regulation because the gaming facilities would be so widely dispersed.

Expanding from eight state-regulated slot locations (including Dania Jai-Alai) to 28 would represent an unprecedented casino expansion in the United States. Once this action is taken, it will be difficult to unscramble the egg.

2. GGR and Related Projections (Minimizing Cannibalization, Scenario G-1)

Under this scenario, we project slot machines would be economically viable additions at 18 (of the 20) pari-mutuels outside of Miami-Dade and Broward counties. We project these 18 pari-mutuels could collectively generate \$1.74 billion in GGR annually from 18,300 slot machines (averaging \$260 in slot revenue per unit per day). Of the 18 locations that would have slots, the average location would have 1,017 slots, while the median value in our result set is 550 slots (i.e., nine locations would have 500 slots, while four locations would warrant 2,000 slots per our modeling and assumptions utilized).

We project the eight pari-mutuels in Miami-Dade and Broward counties would generate \$609 million in gross slot revenue. Therefore, under this scenario, there would be 26 pari-mutuels with slots that could generate \$2.345 billion of gross slot revenue, with net slot revenue of \$2.11 billion. This level of revenue would result in revenue due to the State as follows:

- \$738.8 million under the current 35 percent tax rate.
- \$569.9 million at the US median effective GGR tax rate of 27 percent.
- \$1.14 billion at the effective rate(s) in Pennsylvania.⁷³

We estimate the eight Native American casinos would have \$1.833 billion of combined slot and table games revenue. In total, we project statewide GGR from a total of 34 pari-mutuel and Native American casinos would be \$4.179 billion. A summary of this scenario is in the following table:

Figure 28: Scenario G-1, minimizing cannibalization – Slots at pari-mutuels statewide, landscape and projections

Florida Casinos	Authorizing pari-mutuel facilities in counties other than Miami-Dade & Broward to offer slot machines				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	26	8	0	34	18	112.5%
# Counties	18	6	0	21	15	250.0%
# Slots	26,709	14,564	0	41,273	18,300	79.7%
# Table Games	0	344	0	344	344	n/a
# Gaming Positions	26,709	16,628	0	43,337	20,364	88.6%
GGR (\$M)	\$2,345.3	\$1,833.4	\$0.0	\$4,178.7	\$1,723.0	70.2%
GGR / Position / Day	\$241	\$302	\$0	\$264	(\$29)	-9.8%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be 33.6 percent; the rate for adults residing within a one-hour drive of a casino would be 36.3 percent and 30 percent beyond a one-hour drive.

3. Economic/Fiscal Impact (Minimizing Cannibalization, Scenario G-1)

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario G-1 includes one year of construction in the first year and does not include Compact revenues. The economic impacts rise sharply in the first year which only reflects construction impacts, then continue on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 17,257 and Gross State Product is \$1.9 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US and Pennsylvania rate simulations. The US rates simulation starts lower but ends higher due to the lower tax rate causing less government spending upfront and lower costs for gaming

⁷³ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

establishments later. Total state revenues range from an average of \$404.9 million under the US median gaming tax rate to \$839.1 million under the Pennsylvania gaming tax rates.

Figure 29: Scenario G-1, slots at pari-mutuels statewide but minimizing cannibalization – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	12,083	17,645	17,614	17,257	16,914	16,642
Gross State Product	\$812	\$1,766	\$1,822	\$1,853	\$1,885	\$1,922
Gaming Taxes	\$0.03	\$300.12	\$609.65	\$629.15	\$649.50	\$670.38
Sales/Use Tax	\$7.69	\$19.16	\$24.24	\$26.34	\$28.00	\$29.54
Lottery	\$0.99	\$2.09	\$1.92	\$1.53	\$1.25	\$0.98
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$5.23	\$16.21	\$23.20	\$26.66	\$29.21	\$31.33
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	16,420	16,263	16,156	16,119	17,257	
Gross State Product	\$1,963	\$2,010	\$2,061	\$2,118	\$1,853	
Gaming Taxes	\$691.33	\$712.09	\$732.66	\$753.10	\$629.15	
Sales/Use Tax	\$31.11	\$32.74	\$34.41	\$36.11	\$26.34	
Lottery	\$0.80	\$0.69	\$0.62	\$0.58	\$1.53	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$33.21	\$35.07	\$36.74	\$38.33	\$26.66	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 30: Scenario G-1, slots at pari-mutuels statewide but minimizing cannibalization – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	12,084	16,198	16,647	16,705	16,699	16,681
Gross State Product	\$812	\$1,656	\$1,751	\$1,818	\$1,881	\$1,945
Gaming Taxes	\$0.03	\$231.70	\$470.73	\$485.89	\$501.69	\$517.88
Sales/Use Tax	\$7.70	\$17.95	\$21.99	\$24.47	\$26.52	\$28.44
Lottery	\$1.00	\$4.52	\$6.70	\$6.35	\$6.10	\$5.88
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$5.23	\$15.06	\$21.07	\$24.77	\$27.60	\$30.05
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	16,654	16,650	16,659	16,712	16,705	
Gross State Product	\$2,009	\$2,075	\$2,144	\$2,216	\$1,818	
Gaming Taxes	\$534.11	\$550.19	\$566.12	\$581.94	\$485.89	
Sales/Use Tax	\$30.34	\$32.28	\$34.23	\$36.17	\$24.47	
Lottery	\$5.75	\$5.67	\$5.64	\$5.62	\$6.35	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$32.23	\$34.39	\$36.33	\$38.18	\$24.77	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 31: Scenario G-1, slots at pari-mutuels statewide but minimizing cannibalization – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	12,083	21,107	19,958	18,620	17,501	16,624
Gross State Product	\$812	\$2,029	\$1,995	\$1,942	\$1,900	\$1,874
Gaming Taxes	\$0.05	\$463.02	\$940.27	\$969.83	\$1,000.77	\$1,032.59
Sales/Use Tax	\$7.70	\$22.06	\$29.63	\$30.86	\$31.60	\$32.30
Lottery	\$0.99	(\$3.63)	(\$9.32)	(\$9.79)	(\$10.17)	(\$10.54)
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$5.23	\$18.93	\$28.30	\$31.20	\$33.11	\$34.49
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	15,945	15,445	15,071	14,810	18,620	
Gross State Product	\$1,863	\$1,865	\$1,877	\$1,897	\$1,942	
Gaming Taxes	\$1,064.57	\$1,096.32	\$1,127.81	\$1,159.12	\$969.83	
Sales/Use Tax	\$33.10	\$34.04	\$35.07	\$36.17	\$30.86	
Lottery	(\$10.83)	(\$11.04)	(\$11.19)	(\$11.26)	(\$9.79)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$35.68	\$36.85	\$37.92	\$38.89	\$31.20	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 32: Scenario G-1, slots at pari-mutuels statewide but minimizing cannibalization – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$0	\$585	\$603	\$623	\$643
At US Median Rates	\$0	\$451	\$466	\$481	\$496
At Pennsylvania Rates	\$0	\$903	\$931	\$961	\$992
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$664	\$684	\$704	\$724	\$744
At US Median Rates	\$512	\$528	\$543	\$558	\$574
At Pennsylvania Rates	\$1,024	\$1,055	\$1,086	\$1,117	\$1,147

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

An additional 18 pari-mutuels outside of Miami-Dade and Broward counties would yield another \$36 million in license fees and \$4.5 million in regulatory fees annually.

Under this sub-scenario, we believe it is reasonable to expect the additional 18 pari-mutuel casinos throughout Florida would have net direct employment of 8,555 FTEs statewide. Under this sub-scenario, we project a total of 34 casinos statewide would result in net direct employment of 20,363 FTEs.

4. GGR and Related Projections (Maximizing GGR, Scenario G-2)

In contrast to the previous scenario, where the objective was to minimize cannibalization of GGR to existing casinos, under this scenario, we assume the seven pari-mutuel operators outside of Miami-Dade and Broward counties and within a one-hour drive of an existing Florida casino could have more than 500 slot machines each.

Under this scenario, we project slot machines would be economically viable additions for at least 18 of the 20 pari-mutuels outside of Miami-Dade and Broward counties. We project these 18 pari-mutuels could collectively generate \$2.073 billion in GGR annually from 25,700 slot machines (averaging \$221 in slot revenue per unit per day). Of the 18 pari-mutuels with slots, the average would have 1,428 slots, while the median 1,500 (two pari-mutuels would have 500 slots, 14 would have at least 1,100, and five locations would warrant 2,000 slots, per our modeling and assumptions utilized).

We project the eight pari-mutuels in Miami-Dade and Broward counties would generate \$581.7 million in gross slot revenue. Therefore, under this scenario, there would be 26 pari-mutuels with slots that could generate \$2.655 billion of gross slot revenue, with net slot revenue of \$2.39 billion. This level of revenue would result in revenue due to the State as follows:

- \$836.3 million under the current 35 percent rate.
- \$645.1 million at the US median effective GGR tax rate of 27 percent.
- \$1.29 billion at the effective rate(s) in Pennsylvania.⁷⁴

We estimate the eight Native American casinos would have \$1.489 billion of combined slot and table games revenue. In total, we project statewide GGR from a total of 34 pari-mutuel and Native American casinos would be \$4.144 billion. A summary of this scenario:

Figure 33: Scenario G-2, maximizing GGR to new facilities – slots at pari-mutuels statewide, landscape and projections

Florida Casinos	Authorizing pari-mutuel facilities in counties other than Miami-Dade & Broward to offer slot machines				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	26	8	0	34	18	112.5%
# Counties	18	6	0	21	15	250.0%
# Slots	34,109	14,564	0	48,673	25,700	111.9%
# Table Games	0	344	0	344	344	n/a
# Gaming Positions	34,109	16,628	0	50,737	27,764	120.9%
GGR (\$M)	\$2,654.8	\$1,489.2	\$0.0	\$4,144.1	\$1,688.3	68.7%
GGR / Position / Day	\$213	\$245	\$0	\$224	(\$69)	-23.6%

Source: Spectrum Gaming Group

⁷⁴ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

Additionally, we project the statewide casino participation rate would be 33.6 percent; the rate for adults residing within a one-hour drive of a casino would be 36.3 percent and 30 percent beyond a one-hour drive.

5. Economic/Fiscal Impacts (Maximizing GGR, Scenario G-2)

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario G-2 includes one year of construction in the first year and does not include Compact revenues. The economic impacts rise sharply in the first year which only reflects construction impacts, then continue on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 21,758 and Gross State Product is \$2 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US and Pennsylvania rate simulations. The US rates simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$497.2 million under the US median gaming tax rates to \$1 billion under the Pennsylvania gaming tax rates.

Figure 34: Scenario G-2, slots at pari-mutuels statewide and maximizing GGR – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	12,083	22,235	22,216	21,758	21,306	20,931
Gross State Product	\$812	\$1,947	\$2,012	\$2,043	\$2,073	\$2,108
Gaming Taxes	\$0.03	\$353.96	\$719.03	\$742.03	\$766.03	\$790.65
Sales/Use Tax	\$7.69	\$21.87	\$30.07	\$32.82	\$34.96	\$36.92
Lottery	\$0.99	\$2.48	\$2.65	\$2.19	\$1.85	\$1.53
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$5.23	\$18.12	\$27.45	\$31.98	\$35.26	\$37.95
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	20,621	20,393	20,227	20,147	21,758	
Gross State Product	\$2,148	\$2,194	\$2,245	\$2,303	\$2,043	
Gaming Taxes	\$815.34	\$839.83	\$864.09	\$888.19	\$742.03	
Sales/Use Tax	\$38.88	\$40.91	\$42.97	\$45.05	\$32.82	
Lottery	\$1.31	\$1.16	\$1.07	\$1.02	\$2.19	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$40.29	\$42.57	\$44.59	\$46.49	\$31.98	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 35: Scenario G-2, slots at pari-mutuels statewide and maximizing GGR – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	12,084	20,528	21,080	21,116	21,057	20,982
Gross State Product	\$812	\$1,818	\$1,929	\$2,003	\$2,070	\$2,136
Gaming Taxes	\$0.03	\$273.28	\$555.20	\$573.07	\$591.70	\$610.80
Sales/Use Tax	\$7.70	\$20.45	\$27.42	\$30.62	\$33.23	\$35.61
Lottery	\$1.00	\$5.36	\$8.31	\$7.89	\$7.59	\$7.32
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$5.23	\$16.77	\$24.94	\$29.76	\$33.37	\$36.44
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	20,902	20,855	20,819	20,845	21,116	
Gross State Product	\$2,202	\$2,271	\$2,342	\$2,419	\$2,003	
Gaming Taxes	\$629.93	\$648.90	\$667.68	\$686.33	\$573.07	
Sales/Use Tax	\$37.97	\$40.37	\$42.75	\$45.13	\$30.62	
Lottery	\$7.16	\$7.06	\$7.01	\$6.97	\$7.89	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$39.15	\$41.78	\$44.12	\$46.33	\$29.76	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 36: Scenario G-2, slots at pari-mutuels statewide and maximizing GGR – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	12,083	26,323	24,969	23,356	21,989	20,899
Gross State Product	\$812	\$2,258	\$2,216	\$2,147	\$2,090	\$2,050
Gaming Taxes	\$0.05	\$546.08	\$1,108.96	\$1,143.81	\$1,180.30	\$1,217.83
Sales/Use Tax	\$7.70	\$25.29	\$36.42	\$38.13	\$39.20	\$40.15
Lottery	\$0.99	(\$4.28)	(\$10.63)	(\$11.19)	(\$11.64)	(\$12.08)
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$5.23	\$21.34	\$33.46	\$37.32	\$39.84	\$41.64
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	20,050	19,415	18,931	18,583	23,356	
Gross State Product	\$2,028	\$2,022	\$2,026	\$2,042	\$2,147	
Gaming Taxes	\$1,255.54	\$1,292.97	\$1,330.11	\$1,367.03	\$1,143.81	
Sales/Use Tax	\$41.20	\$42.41	\$43.71	\$45.08	\$38.13	
Lottery	(\$12.44)	(\$12.69)	(\$12.88)	(\$12.97)	(\$11.19)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$43.19	\$44.64	\$45.94	\$47.10	\$37.32	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 37: Scenario G-2, slots at pari-mutuels statewide and maximizing GGR – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$684	\$692	\$714	\$737	\$760
At US Median Rates	\$528	\$534	\$550	\$568	\$587
At Pennsylvania Rates	\$1,056	\$1,067	\$1,101	\$1,137	\$1,173
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$785	\$809	\$832	\$856	\$879
At US Median Rates	\$605	\$624	\$642	\$660	\$678
At Pennsylvania Rates	\$1,211	\$1,247	\$1,284	\$1,320	\$1,356

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

An additional 18 pari-mutuels outside of Miami-Dade and Broward counties would yield another \$36 million in license fees and \$4.5 million in regulatory fees.

Under this scenario, we believe it is reasonable to expect the additional 18 pari-mutuel casinos throughout Florida would have net direct employment of 12,015 FTEs statewide. Under this scenario, we project a total of 34 casinos statewide would result in net direct employment of 22,161 FTEs.

Scenario H: Authorizing Table Games at Pari-Mutuels

Our overarching assumption is that table games or other Class III games under this scenario are exclusive of existing and/or future cardroom operations at pari-mutuels. For example, in addition to slot machines, we assume the existing pari-mutuels would be able to offer table games such as blackjack, baccarat, mini-baccarat, as well as other card and/or dice games, including roulette and craps games. As a direct result, we assume Florida's Native American casinos also would have the ability to offer all type of Class III games, consistent with our assumptions in Scenario B.

Our discussion and analysis includes two distinct scenarios for expanded casino gaming at pari-mutuels in Florida:

- Only the existing pari-mutuels offering slots, including Dania Jai-Alai, would offer table games.
- All 28 pari-mutuels would offer both slots and table games.

Our methodology in determining additional table games units at pari-mutuels (and for the Seminole Big Cypress and Brighton locations):

- At locations where slots are currently operating, we assume table games will be incrementally added to the existing slot supply, and we model/allocate number of total table games at a ratio of 3 percent of slot units (i.e., one table game for every 33 slots) based on slot machine counts as of June 30, 2013. This ratio is consistent

with actual table games to slot machine allocation data for the 15 states having commercial casino operations (and both slots and table games) through the 12 months ended March 2013.

- We assume the 20 pari-mutuels outside of Miami-Dade and Broward counties, as well Dania Jai-Alai, also would have table games at a ratio of 3 percent of slot units (i.e., one table game for every 33 slots), while respective slot totals are determined via our modeling.

Under each of the scenarios above, we assume the addition of roulette and craps games at all of the Seminole casinos. (Refer to Scenario B for assumptions/outcomes concerning the addition of these types of games to Native American casinos.)

1. Implications and Considerations

It is our understanding that if this scenario were implemented, revenue sharing per the Seminole Compact would be impacted, as follows:

- **If only Broward/Miami-Dade pari-mutuel locations offered table games:** The Seminole Tribe would be relieved of the minimum revenue share payment and would also be entitled to a reduction in the amount of 50 percent of the decline in revenues from its Broward County facilities, comparing the year before the new gaming began with the 12 months after the new gaming began. Although the Seminole Tribe would also be released from making the guaranteed minimum payments, it would still be obligated to make payments based on the percentage revenue sharing schedule. If this provision were triggered, the Seminole Tribe would receive the relief described until the revenues once again exceed the base year at which point the reduction would be eliminated.
- **If any or all of the 20 pari-mutuel locations outside of Broward and Miami-Dade counties offered slots and/or table games:** It is our understanding that if this scenario were implemented, all revenue sharing per the Seminole Compact would end.

We caution, however, that not all table game operations are created equal, and not all are automatically profitable. An operator with a predominantly local player base may be forced by market conditions to skew toward low-limit tables, which would by definition be less profitable, and generate less GGR and gaming taxes than some other tables would under similar conditions.

That said, the addition of table games creates the opportunity for well-capitalized operations to add first-class hotels and other resort amenities in a bid to attract higher-spending gamblers. Such players have the expectation of being provided complimentary rooms and luxury services.

A critical element in authorizing table games would be the tax rate on table-games revenue. Jurisdictions that have set a high tax rate on slot revenue have established lower rates

on table games because of the significantly higher labor costs involved. For example, Pennsylvania had an effective tax rate of 54 percent on slot revenue and an effective rate of 15 percent⁷⁵ on table games revenue for its fiscal year ended June 2013. Delaware, Maryland and West Virginia also have established a bifurcated gaming-revenue tax scheme. One of the newest casino jurisdictions (Ohio) set a tax rate of 33 percent on both slots and tables.

As noted in Scenario G, the revenue generated by slot machines and table games statewide could provide a valuable funding source for racing purses and improved racing facilities, if operators were required to supplement purses, as demonstrated with the South Florida racinos and in other racino states. This could in turn enable the host pari-mutuel facilities to attract more and higher-quality horses and jockeys (and greyhounds), which would flow through to benefit trainers and breeders. However – as results in other racino states have shown – a higher-quality racing product does not necessarily translate into higher handle/increased popularity for the racing industry, as this activity is in decline nationwide.

As noted in Chapter I[e][3], the addition of slot machines may positively impact cardroom revenues. The cardrooms may also benefit from crossover between poker players and blackjack players. The capital improvements required to add slot machines and table games may require, or at least encourage, the host racetrack to simultaneously upgrade its cardroom, which could make it more popular with patrons.

The scale of such expansion would add logistical concerns regarding the cost of regulation. This would occur due to the increased need for oversight of table games operations at existing pari-mutuel locations in Broward and Miami-Dade counties or in combination with the oversight of both slots and table games at up to 20 additional locations that would be widely dispersed statewide.

2. If Only Broward/Miami-Dade Pari-Mutuels Offered Slots and Tables

The salient assumption under this scenario is that all pari-mutuels in Miami-Dade and Broward counties (inclusive of Dania Jai-Alai) would offer both slots and table games, while seven Native American casinos would add Class III casino-style table games, as well. None of the 20 pari-mutuels outside of Miami-Dade and Broward counties would have slots or tables, only cardrooms.

Under this sub-scenario, we estimate there would be 22,973 slot machines and 670 table games (and 26,995 gaming positions) at 16 casinos statewide. Assuming existing casinos do not add or subtract gaming positions from the slot and table games counts as of June 30, 2013, there would be 9,929 gaming positions (36.7 percent of statewide gaming positions) at the eight

⁷⁵ Pennsylvania's effective table games tax has two salient components: a state tax and a local-share assessment. The state tax on banking, non-banking and electronic gaming tables is 14 percent for the first two years following commencement of table games operations at each licensed facility; the rate drops to 12 percent following this period. The local share assessment is 2 percent.

racetrack locations in Broward and Miami-Dade counties, while the balance of statewide gaming positions (63.3 percent) would be at the eight Native American casinos. Under this scenario, Broward and Miami-Dade counties would have 71.2 percent of the total statewide gaming positions and Hillsborough County would have 21.8 percent. There would still be six counties in Florida with at least one casino.

a. GGR and Related Projections (Scenario H-1)

Under this scenario, we project the eight pari-mutuels in Miami-Dade and Broward counties could collectively generate \$730.4 million in GGR annually from 9,909 gaming positions. We project total slot revenue of \$619.8 million from 8,409 slot machines and total table revenue of \$110.6 million from 250 table games. From this, we assume taxable GGR would be \$668.4 million. This level of revenue would result in revenue due to the State as follows:

- \$234 million under the current 35 percent tax rate.
- \$180.5 million at the US median effective GGR tax rate of 27 percent.
- \$314.5 million at the effective rate(s) in Pennsylvania.⁷⁶

We estimate the eight Native American casinos would have \$2.078 billion of combined slot and table games revenue.

In total, we project statewide GGR (from a total of 16 pari-mutuel and Native American casinos in Florida) would be \$2.808 billion. A summary of this scenario is in the following table:

Figure 38: Scenario H-1 – tables and slots only at Broward/Miami-Dade pari-mutuels, landscape and projections

Florida Casinos	Authorizing pari-mutuel facilities to conduct table games or other Class III games				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	8	8	0	16	0	0.0%
# Counties	2	6	0	6	0	0.0%
# Slots	8,409	14,564	0	22,973	0	0.0%
# Table Games	250	431	0	681	681	n/a
# Gaming Positions	9,909	17,150	0	27,059	4,086	17.8%
GGR (\$M)	\$730.4	\$2,077.6	\$0.0	\$2,808.0	\$352.3	14.3%
GGR / Position / Day	\$202	\$332	\$0	\$284	(\$9)	-2.9%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be 23.1 percent; the rate for adults residing within a one-hour drive of a casino would be 32 percent and 11.8 percent beyond a one-hour drive.

⁷⁶ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

b. Economic/Fiscal Impacts (Scenario H-1)

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario H-1 includes one year of construction in the first year and does include Compact revenues but excludes the facilities in Broward County from the revenue-sharing calculation. The economic impacts rise sharply in the first year which only reflects construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 3,688 and Gross State Product is \$297 million under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy, Scenario H-1 displays a pattern of employment and tax revenue impacts that is different from most other scenarios. Here employment is highest and revenues lowest in the Pennsylvania gaming tax rates budget. This impact is due to the blended nature of the Pennsylvania rates – a tax rate of 54 percent on slots and 12 percent on table games. The expansion contemplated under this scenario is from table games, therefore the Pennsylvania tax rates represent the lowest tax burden on gaming establishments.

Total state revenues range from an average of \$33.7 million under the Pennsylvania gaming tax rates to \$63.7 million under the Default Budget. The static tax estimates are negative relative to the Baseline under the Pennsylvania gaming tax rates model. In the GGR modeling (going from Baseline to Scenario H-1) we project an overall GGR increase of \$82 million (from new table games revenue of \$110.6 million less slot revenue decline of \$28.6 million). Importantly, the decline in net slot revenue (taxed at 54 percent) yields \$13.9 million less in tax revenue (from what it otherwise would be in the Baseline scenario), while the new table games revenue (taxed at 12 percent) cannot overcome that loss in tax revenue so the net result is a slight negative static tax estimate.

Figure 39: Scenario H-1, tables and slots only at Broward/Miami-Dade pari-mutuels – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	6,201	4,095	3,847	3,688	3,567	3,489
Gross State Product	\$417	\$307	\$299	\$297	\$298	\$302
Gaming Taxes	\$0.02	\$17.46	\$35.41	\$36.51	\$37.66	\$38.85
Sales/Use Tax	\$3.95	\$6.64	\$5.46	\$5.61	\$5.80	\$6.01
Lottery	\$0.51	(\$0.77)	(\$2.53)	(\$2.54)	(\$2.56)	(\$2.57)
Compact Revenues	\$0.00	\$11.33	\$23.01	\$23.74	\$24.51	\$25.30
All other Revenues	\$2.68	\$4.68	\$4.08	\$4.42	\$4.70	\$4.92
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	3,436	3,408	3,398	3,403	3,688	
Gross State Product	\$308	\$315	\$324	\$334	\$297	
Gaming Taxes	\$40.04	\$41.23	\$42.41	\$43.59	\$36.51	
Sales/Use Tax	\$6.26	\$6.55	\$6.87	\$7.21	\$5.61	
Lottery	(\$2.59)	(\$2.60)	(\$2.60)	(\$2.58)	(\$2.54)	
Compact Revenues	\$26.08	\$26.86	\$27.64	\$28.41	\$23.74	
All other Revenues	\$5.14	\$5.37	\$5.58	\$5.80	\$4.42	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 40: Scenario H-1, tables and slots only at Broward/Miami-Dade pari-mutuels – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	6,201	4,013	3,788	3,649	3,550	3,484
Gross State Product	\$417	\$301	\$295	\$295	\$297	\$303
Gaming Taxes	\$0.01	\$13.48	\$27.34	\$28.20	\$29.09	\$30.01
Sales/Use Tax	\$3.95	\$6.57	\$5.33	\$5.49	\$5.70	\$5.93
Lottery	\$0.51	(\$0.64)	(\$2.26)	(\$2.28)	(\$2.29)	(\$2.31)
Compact Revenues	\$0.00	\$11.33	\$23.01	\$23.74	\$24.51	\$25.30
All other Revenues	\$2.68	\$4.61	\$3.96	\$4.32	\$4.61	\$4.84
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	3,445	3,425	3,417	3,428	3,649	
Gross State Product	\$310	\$318	\$328	\$339	\$295	
Gaming Taxes	\$30.94	\$31.86	\$32.77	\$33.68	\$28.20	
Sales/Use Tax	\$6.20	\$6.51	\$6.84	\$7.20	\$5.49	
Lottery	(\$2.32)	(\$2.32)	(\$2.32)	(\$2.31)	(\$2.28)	
Compact Revenues	\$26.08	\$26.86	\$27.64	\$28.41	\$23.74	
All other Revenues	\$5.07	\$5.31	\$5.54	\$5.76	\$4.32	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 41: Scenario H-1, tables and slots only at Broward/Miami-Dade pari-mutuels – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	6,200	3,755	3,641	3,584	3,548	3,531
Gross State Product	\$417	\$282	\$285	\$292	\$300	\$310
Gaming Taxes	\$0.03	\$1.36	\$2.73	\$2.83	\$2.94	\$3.05
Sales/Use Tax	\$3.95	\$6.35	\$4.94	\$5.20	\$5.49	\$5.80
Lottery	\$0.51	(\$0.18)	(\$1.35)	(\$1.35)	(\$1.36)	(\$1.36)
Compact Revenues	\$0.00	\$11.33	\$23.01	\$23.74	\$24.51	\$25.30
All other Revenues	\$2.68	\$4.40	\$3.59	\$4.01	\$4.37	\$4.69
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	3,528	3,538	3,554	3,577	3,584	
Gross State Product	\$322	\$335	\$347	\$362	\$292	
Gaming Taxes	\$3.16	\$3.28	\$3.39	\$3.50	\$2.83	
Sales/Use Tax	\$6.14	\$6.52	\$6.91	\$7.31	\$5.20	
Lottery	(\$1.37)	(\$1.36)	(\$1.36)	(\$1.34)	(\$1.35)	
Compact Revenues	\$26.08	\$26.86	\$27.64	\$28.41	\$23.74	
All other Revenues	\$4.98	\$5.29	\$5.58	\$5.86	\$4.01	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 42: Scenario H-1, tables and slots only at Broward/Miami-Dade pari-mutuels – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$45	\$32	\$34	\$35	\$36
At US Median Rates	\$35	\$25	\$26	\$27	\$28
At Pennsylvania Rates	\$20	(\$1)	(\$1)	(\$1)	(\$1)
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$37	\$38	\$39	\$40	\$41
At US Median Rates	\$28	\$29	\$30	\$31	\$32
At Pennsylvania Rates	(\$1)	(\$1)	(\$1)	(\$1)	(\$1)

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Under this scenario, we believe it is reasonable to expect the addition of table games at eight pari-mutuels in Miami-Dade and Broward counties would lead to these locations having net direct employment of 5,185 FTEs. Under this scenario, we project Florida’s 16 casinos would yield net direct employment of 14,155 FTEs.

c. GGR and Related Projections (with Option to End Pari-Mutuel Live Events, Scenario H-2)

In this sub-scenario, pari-mutuel facilities would be permitted to end live performances, with supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.

GGR projections (to determine fiscal impacts) for this scenario mimic our projections per Scenario H-1, whereby only pari-mutuel locations in Miami-Dade and Broward counties would add table games (and none of the 20 pari-mutuels outside of Miami-Dade and Broward counties would have slots or tables, only cardrooms). However, in addition to aforementioned revenue-due-to-the-State figures, we project \$31.2 million would need to be generated for purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the rate to generate such purse subsidies would be 4.27 percent under this scenario; however, this rate would be 4.67 percent based on taxable GGR.

d. Economic/Fiscal Impacts (with Option to End Pari-Mutuel Live Events, Scenario H-2)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget and three different tax rates. (See Chapter I[H] for methodology detail.) This combination scenario captures the effects of a reduction in live racing in addition to the changes introduced in Scenario H. This scenario includes one year of construction in the first year and does include Compact revenues. The economic impacts rise sharply in the first year which only reflects construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 3,235 and Gross State Product is \$289 million under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. The above discussion in Scenario H-1 on the pattern of employment and tax revenues hold for Scenario H-2 as well. Total state revenues range from an average of \$32.6 million under the Pennsylvania gaming tax rates to \$62.6 million under the Default Budget.

Figure 43: Scenario H-2, table games at Broward/Miami-Dade pari-mutuels and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	5,727	3,627	3,387	3,235	3,126	3,054
Gross State Product	\$408	\$298	\$290	\$289	\$290	\$294
Gaming Taxes	\$0.00	\$17.43	\$35.38	\$36.48	\$37.63	\$38.82
Sales/Use Tax	\$3.72	\$6.15	\$4.90	\$5.01	\$5.16	\$5.33
Lottery	\$0.49	(\$0.81)	(\$2.56)	(\$2.57)	(\$2.58)	(\$2.59)
Compact Revenues	\$0.00	\$11.33	\$23.01	\$23.74	\$24.51	\$25.30
All other Revenues	\$2.62	\$4.48	\$3.78	\$4.06	\$4.28	\$4.46
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	3,004	2,979	2,971	2,975	3,235	
Gross State Product	\$299	\$307	\$316	\$326	\$289	
Gaming Taxes	\$40.01	\$41.20	\$42.38	\$43.55	\$36.48	
Sales/Use Tax	\$5.54	\$5.79	\$6.07	\$6.36	\$5.01	
Lottery	(\$2.60)	(\$2.61)	(\$2.61)	(\$2.60)	(\$2.57)	
Compact Revenues	\$26.08	\$26.86	\$27.64	\$28.41	\$23.74	
All other Revenues	\$4.64	\$4.83	\$5.02	\$5.21	\$4.06	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 44: Scenario H-2, table games at Broward/Miami-Dade pari-mutuels and reduction in pari-mutuel events – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	5,730	3,545	3,326	3,198	3,108	3,049
Gross State Product	\$408	\$292	\$286	\$286	\$289	\$295
Gaming Taxes	\$0.00	\$13.45	\$27.32	\$28.17	\$29.07	\$29.98
Sales/Use Tax	\$3.72	\$6.08	\$4.77	\$4.89	\$5.06	\$5.25
Lottery	\$0.49	(\$0.68)	(\$2.30)	(\$2.31)	(\$2.31)	(\$2.32)
Compact Revenues	\$0.00	\$11.33	\$23.01	\$23.74	\$24.51	\$25.30
All other Revenues	\$2.62	\$4.41	\$3.66	\$3.95	\$4.19	\$4.39
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	3,012	2,994	2,989	3,000	3,198	
Gross State Product	\$301	\$310	\$320	\$331	\$286	
Gaming Taxes	\$30.91	\$31.83	\$32.74	\$33.65	\$28.17	
Sales/Use Tax	\$5.48	\$5.74	\$6.04	\$6.35	\$4.89	
Lottery	(\$2.33)	(\$2.34)	(\$2.34)	(\$2.32)	(\$2.31)	
Compact Revenues	\$26.08	\$26.86	\$27.64	\$28.41	\$23.74	
All other Revenues	\$4.58	\$4.79	\$5.00	\$5.20	\$3.95	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 45: Scenario H-2, table games at Broward/Miami-Dade pari-mutuels and reduction in pari-mutuel events – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	5,727	3,286	3,180	3,134	3,106	3,098
Gross State Product	\$408	\$272	\$276	\$283	\$292	\$302
Gaming Taxes	\$0.00	\$1.32	\$2.69	\$2.79	\$2.90	\$3.01
Sales/Use Tax	\$3.72	\$5.85	\$4.38	\$4.60	\$4.85	\$5.12
Lottery	\$0.49	(\$0.21)	(\$1.38)	(\$1.38)	(\$1.38)	(\$1.38)
Compact Revenues	\$0.00	\$11.33	\$23.01	\$23.74	\$24.51	\$25.30
All other Revenues	\$2.62	\$4.20	\$3.29	\$3.65	\$3.96	\$4.22
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	3,098	3,107	3,125	3,148	3,134	
Gross State Product	\$314	\$326	\$339	\$353	\$283	
Gaming Taxes	\$3.12	\$3.23	\$3.34	\$3.45	\$2.79	
Sales/Use Tax	\$5.42	\$5.75	\$6.10	\$6.46	\$4.60	
Lottery	(\$1.38)	(\$1.38)	(\$1.37)	(\$1.35)	(\$1.38)	
Compact Revenues	\$26.08	\$26.86	\$27.64	\$28.41	\$23.74	
All other Revenues	\$4.48	\$4.76	\$5.02	\$5.27	\$3.65	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions.

Figure 46: Scenario H-2, table games at Broward/Miami-Dade pari-mutuels and reduction in pari-mutuel events – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$45	\$32	\$34	\$35	\$36
At US Median Rates	\$35	\$25	\$26	\$27	\$28
At Pennsylvania Rates	\$20	(\$1)	(\$1)	(\$1)	(\$1)
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$37	\$38	\$39	\$40	\$41
At US Median Rates	\$28	\$29	\$30	\$31	\$32
At Pennsylvania Rates	(\$1)	(\$1)	(\$1)	(\$1)	(\$1)

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions.

3. If All 28 Pari-Mutuels Offered Slots and Table Games

Assumptions under this sub-scenario are consistent with those in Scenario G, in which the salient assumption is there could be 20 additional pari-mutuel casinos outside of Broward and Miami-Dade counties. These 20 locations would have the ability to offer both slots and table games. In addition, we assume all pari-mutuels in Miami-Dade and Broward counties (inclusive Dania Jai-Alai) also would offer both slots and table games.

Under this sub-scenario, and with 20 additional pari-mutuel casinos outside of Miami-Dade and Broward counties, there could be 23 counties with at least one casino versus six counties today.

a. GGR and Related Projections (Minimizing Cannibalization, Scenario H-3)

Under this sub-scenario, we project a complement of both slots and tables would be economically viable additions at 18 of the 20 pari-mutuels outside of Miami-Dade and Broward counties. We project these 18 pari-mutuels could collectively generate \$1.988 billion in GGR annually from 21,240 gaming positions. We project total slot revenue of \$1.685 billion from 18,000 slot machines and total table revenue of \$303.2 million from 540 table games. Of the 18 locations, the average location would have 1,180 gaming positions (1,000 slots and 30 table games), while the median in our result set is 708 gaming positions (600 slots and 18 table games). Furthermore, eight pari-mutuels would have the minimal amount of gaming positions (500 slots and 15 table games), three locations would warrant 2,000 slots and 60 table games (2,360 gaming positions), per our modeling and assumptions.

We project the eight pari-mutuels in Miami-Dade and Broward counties would generate \$718.7 million in GGR, with \$609.9 million of gross slot revenue and \$108.8 million of total table games revenue. Therefore, under this scenario, there would be 26 pari-mutuels with both slots and table games, which could generate \$2.294 billion of gross slot revenue and \$412 million of total table games revenue. From this we assume taxable GGR would be \$2.477 billion. This level of revenue would result in revenue due to the State as follows:

- \$867 million under the current 35 percent tax rate.
- \$668.8 million at the US median effective GGR tax rate of 27 percent.
- \$1.164 billion at the effective rate(s) in Pennsylvania.⁷⁷

We estimate the eight Native American casinos would have \$1.759 billion of combined slot and table games revenue.

In total, we project statewide GGR from a total of 34 pari-mutuel and Native American casinos would be \$4.466 billion. A summary of this scenario is in the following table:

⁷⁷ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

Figure 47: Scenario H-3, minimizing cannibalization – slots and tables at pari-mutuels statewide, landscape and projections

Florida Casinos	Authorizing pari-mutuel facilities to conduct table games or other Class III games				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	26	8	0	34	18	112.5%
# Counties	18	6	0	21	15	250.0%
# Slots	26,409	14,564	0	40,973	18,000	78.4%
# Table Games	790	431	0	1,221	1,221	n/a
# Gaming Positions	31,149	17,150	0	48,299	25,326	110.2%
GGR (\$M)	\$2,706.3	\$1,759.2	\$0.0	\$4,465.5	\$2,009.8	81.8%
GGR / Position / Day	\$238	\$281	\$0	\$253	(\$40)	-13.5%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate would be 33.6 percent, while the rate for adults residing within a one-hour drive of a casino would be 36.3 percent and 30 percent for those living beyond a one-hour drive of a casino.

b. Economic/Fiscal Impact (Minimizing Cannibalization, Scenario H-3)

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario H-3 includes one year of construction in the first year and does not include Compact revenues. The economic impacts rise sharply in the first year which only reflects construction impacts, then continue on a steady growth path reflecting the impacts of changes in the gaming sector. Over the course of the simulation, the average employment is 23,560 and Gross State Product is \$2.3 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. Total state revenues range from an average of \$527.8 million under the US median gaming tax rates to \$887 million under the Pennsylvania gaming tax rates.

Figure 48: Scenario H-3, tables and slots only at pari-mutuels statewide but minimizing cannibalization – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,951	24,174	24,081	23,560	23,056	22,647
Gross State Product	\$937	\$2,184	\$2,251	\$2,286	\$2,320	\$2,359
Gaming Taxes	\$0.04	\$371.71	\$755.07	\$779.21	\$804.41	\$830.25
Sales/Use Tax	\$8.88	\$24.29	\$32.62	\$35.50	\$37.77	\$39.85
Lottery	\$1.15	\$2.05	\$1.51	\$1.06	\$0.71	\$0.39
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$6.04	\$19.92	\$29.55	\$34.32	\$37.79	\$40.63
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	22,317	22,081	21,909	21,832	23,560	
Gross State Product	\$2,405	\$2,459	\$2,518	\$2,585	\$2,286	
Gaming Taxes	\$856.18	\$881.88	\$907.35	\$932.65	\$779.21	
Sales/Use Tax	\$41.95	\$44.14	\$46.37	\$48.62	\$35.50	
Lottery	\$0.16	\$0.02	(\$0.08)	(\$0.12)	\$1.06	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$43.13	\$45.56	\$47.73	\$49.76	\$34.32	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 49: Scenario H-3, tables and slots only at pari-mutuels statewide but minimizing cannibalization – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,951	22,385	22,887	22,885	22,792	22,702
Gross State Product	\$937	\$2,048	\$2,164	\$2,243	\$2,315	\$2,388
Gaming Taxes	\$0.03	\$286.97	\$583.00	\$601.76	\$621.32	\$641.36
Sales/Use Tax	\$8.89	\$22.80	\$29.84	\$33.20	\$35.95	\$38.49
Lottery	\$1.15	\$5.07	\$7.44	\$7.03	\$6.73	\$6.46
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$6.04	\$18.50	\$26.91	\$31.98	\$35.80	\$39.05
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	22,610	22,561	22,528	22,569	22,885	
Gross State Product	\$2,462	\$2,540	\$2,620	\$2,707	\$2,243	
Gaming Taxes	\$661.45	\$681.36	\$701.08	\$720.66	\$601.76	
Sales/Use Tax	\$41.00	\$43.56	\$46.14	\$48.72	\$33.20	
Lottery	\$6.30	\$6.20	\$6.15	\$6.12	\$7.03	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$41.92	\$44.72	\$47.22	\$49.59	\$31.98	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 50: Scenario H-3, tables and slots only at pari-mutuels statewide but minimizing cannibalization – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,950	26,432	25,652	24,495	23,494	22,687
Gross State Product	\$937	\$2,355	\$2,368	\$2,348	\$2,334	\$2,333
Gaming Taxes	\$0.06	\$478.24	\$971.31	\$1,002.07	\$1,034.23	\$1,067.28
Sales/Use Tax	\$8.89	\$26.18	\$36.15	\$38.51	\$40.20	\$41.73
Lottery	\$1.15	(\$1.63)	(\$5.73)	(\$6.23)	(\$6.64)	(\$7.03)
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$6.04	\$21.69	\$32.88	\$37.32	\$40.39	\$42.77
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	22,064	21,603	21,258	21,036	24,495	
Gross State Product	\$2,346	\$2,370	\$2,404	\$2,448	\$2,348	
Gaming Taxes	\$1,100.47	\$1,133.41	\$1,166.09	\$1,198.56	\$1,002.07	
Sales/Use Tax	\$43.35	\$45.10	\$46.92	\$48.80	\$38.51	
Lottery	(\$7.33)	(\$7.54)	(\$7.68)	(\$7.74)	(\$6.23)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$44.83	\$46.83	\$48.61	\$50.26	\$37.32	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 51: Scenario H-3, tables and slots only at pari-mutuels statewide but minimizing cannibalization – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$717	\$725	\$748	\$772	\$797
At US Median Rates	\$553	\$559	\$577	\$596	\$615
At Pennsylvania Rates	\$923	\$930	\$959	\$990	\$1,022
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$823	\$848	\$873	\$897	\$922
At US Median Rates	\$635	\$654	\$673	\$692	\$711
At Pennsylvania Rates	\$1,054	\$1,087	\$1,119	\$1,150	\$1,181

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

An additional 18 pari-mutuels outside of Miami-Dade and Broward counties would yield another \$36 million in license fees and \$4.5 million in regulatory fees.

Under this scenario, we believe it is reasonable to expect the additional 18 pari-mutuel casinos throughout Florida would have net direct employment of 11,123 FTEs statewide. Under this scenario, we project a total of 34 casinos statewide would result in net direct employment of 23,984 FTEs.

c. GGR and Related Projections (Maximizing GGR, Scenario H-4)

In contrast to the previous sub-scenario in which the objective was to minimize cannibalization of GGR to existing casinos, under this scenario, we assume the seven pari-mutuel operators outside of Miami-Dade and Broward counties and within a one-hour drive of an existing Florida casino could have more than 500 slot machines.

Under this scenario, we project that a complement of both slots and tables would be economically viable for at least 18 of the 20 pari-mutuels outside of Miami-Dade and Broward counties. We project these 18 pari-mutuels could collectively generate \$2.361 billion in GGR annually from 29,736 gaming positions. We project total slot revenue of \$2 billion from 25,200 slot machines and total table revenue of \$360.1 million from 756 table games. Of the 18 locations, the average location would have 1,652 gaming positions (1,400 slots and 42 table games), while the median in our result set is 1,711 gaming positions (1,450 slots and 43.5 table games). Furthermore, one location would have the minimal amount of gaming positions (500 slots and 15 table games), 14 locations would have in excess of 1,000 slots and 30 table games, and at least four locations would warrant 2,000 slots and 60 table games (2,360 gaming positions), per our modeling and assumptions utilized.

We project the eight pari-mutuels in Miami-Dade and Broward counties would generate \$685.2 million in GGR, with \$581.4 million of gross slot revenue and \$103.8 million of table games revenue. Therefore, under this scenario, there would be 26 pari-mutuels with both slots and table games that could generate \$2.582 billion of gross slot revenue and \$463.9 million of table games revenue. From this, we assume taxable GGR would be \$2.788 billion. This level of revenue would result in revenue due to the State as follows:

- \$975.7 million under the current 35 percent tax rate.
- \$752.7 million at the US median effective GGR tax rate of 27 percent.
- \$1.311 billion at the effective rate(s) in Pennsylvania.⁷⁸

We estimate the eight Native American casinos would have \$1.42 billion of combined slot and table games revenue.

In total, we project statewide GGR (from a total of 34 pari-mutuel and Native American casinos in Florida) would be \$4.466 billion. A summary of this scenario is in the following table:

⁷⁸ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

Figure 52: Scenario H-4, maximizing gaming revenue – slots and tables at pari-mutuels statewide, landscape and projections

<u>Florida Casinos</u>	<u>Authorizing pari-mutuel facilities to conduct table games or other Class III games</u>				<u>Compared to Baseline</u>	
	<u>Total Pari-mutuel</u>	<u>Native American</u>	<u>Destination Resorts</u>	<u>Grand Total</u>	<u>\$ Var.</u>	<u>% Var.</u>
# Locations	26	8	0	34	18	112.5%
# Counties	18	6	0	21	15	250.0%
# Slots	33,609	14,564	0	48,173	25,200	109.7%
# Table Games	1,006	431	0	1,437	1,437	n/a
# Gaming Positions	39,645	17,150	0	56,795	33,822	147.2%
GGR (\$M)	\$3,045.9	\$1,419.7	\$0.0	\$4,465.5	\$2,009.8	81.8%
GGR / Position / Day	\$210	\$227	\$0	\$215	(\$77)	-26.4%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be 33.6 percent, while this rate for adults residing within a one-hour drive of a casino would be 36.3 percent and the rate would be 30 percent for those living beyond a one-hour drive of a casino.

d. Economic/Fiscal Impacts (Maximizing GGR, Scenario H-4)

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario H-4 includes one year of construction in the first year and does not include Compact revenues. The economic impacts rise sharply in the first year which only reflects construction impacts, then continue on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 29,323 and Gross State Product is \$2.5 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US and Pennsylvania rate simulations. The US rates simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$640.1 million under the US median gaming tax rates to \$1.1 billion under the Pennsylvania gaming tax rates.

Figure 53: Scenario H-4, tables and slots only at pari-mutuels statewide and maximizing GGR – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,951	30,051	29,969	29,323	28,683	28,145
Gross State Product	\$937	\$2,418	\$2,497	\$2,532	\$2,564	\$2,601
Gaming Taxes	\$0.04	\$431.87	\$877.29	\$905.34	\$934.60	\$964.63
Sales/Use Tax	\$8.88	\$27.70	\$39.94	\$43.66	\$46.55	\$49.16
Lottery	\$1.15	\$2.44	\$2.24	\$1.71	\$1.28	\$0.89
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$6.04	\$22.18	\$34.62	\$40.74	\$45.13	\$48.70
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	27,707	27,386	27,145	27,018	29,323	
Gross State Product	\$2,645	\$2,700	\$2,759	\$2,829	\$2,532	
Gaming Taxes	\$994.74	\$1,024.60	\$1,054.19	\$1,083.58	\$905.34	
Sales/Use Tax	\$51.77	\$54.46	\$57.20	\$59.97	\$43.66	
Lottery	\$0.62	\$0.43	\$0.31	\$0.24	\$1.71	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$51.80	\$54.75	\$57.38	\$59.82	\$40.74	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 54: Scenario H-4, tables and slots only at pari-mutuels statewide and maximizing GGR – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,951	27,973	28,820	28,738	28,548	28,361
Gross State Product	\$937	\$2,260	\$2,415	\$2,499	\$2,574	\$2,649
Gaming Taxes	\$0.03	\$333.41	\$689.85	\$710.07	\$731.73	\$754.44
Sales/Use Tax	\$8.89	\$25.96	\$36.89	\$41.32	\$44.76	\$47.89
Lottery	\$1.15	\$5.96	\$9.18	\$8.70	\$8.33	\$7.99
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$6.04	\$20.53	\$31.66	\$38.28	\$43.09	\$47.13
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	28,188	28,063	27,970	27,946	28,738	
Gross State Product	\$2,724	\$2,805	\$2,888	\$2,977	\$2,499	
Gaming Taxes	\$777.45	\$800.13	\$822.18	\$843.44	\$710.07	
Sales/Use Tax	\$50.98	\$54.09	\$57.22	\$60.31	\$41.32	
Lottery	\$7.78	\$7.65	\$7.58	\$7.52	\$8.70	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$50.66	\$54.04	\$57.03	\$59.82	\$38.28	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 55: Scenario H-4, tables and slots only at pari-mutuels statewide and maximizing GGR – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,950	32,750	31,828	30,424	29,184	28,176
Gross State Product	\$937	\$2,623	\$2,635	\$2,604	\$2,579	\$2,568
Gaming Taxes	\$0.06	\$559.07	\$1,135.48	\$1,171.42	\$1,209.01	\$1,247.63
Sales/Use Tax	\$8.89	\$29.96	\$44.17	\$47.23	\$49.42	\$51.38
Lottery	\$1.15	(\$1.97)	(\$6.44)	(\$7.04)	(\$7.54)	(\$8.01)
Compact Revenues	\$0.00	(\$56.96)	(\$109.72)	(\$109.72)	(\$111.92)	(\$111.72)
All other Revenues	\$6.04	\$24.30	\$38.60	\$44.31	\$48.22	\$51.22
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	27,388	26,796	26,347	26,045	30,424	
Gross State Product	\$2,573	\$2,591	\$2,621	\$2,663	\$2,604	
Gaming Taxes	\$1,286.42	\$1,324.91	\$1,363.10	\$1,401.05	\$1,171.42	
Sales/Use Tax	\$53.40	\$55.56	\$57.81	\$60.11	\$47.23	
Lottery	(\$8.37)	(\$8.63)	(\$8.80)	(\$8.90)	(\$7.04)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$109.72)	
All other Revenues	\$53.79	\$56.21	\$58.36	\$60.32	\$44.31	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 56: Scenario H-4, tables and slots only at pari-mutuels statewide and maximizing GGR – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$832	\$844	\$871	\$899	\$928
At US Median Rates	\$642	\$651	\$672	\$694	\$716
At Pennsylvania Rates	\$1,078	\$1,089	\$1,124	\$1,160	\$1,198
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$958	\$987	\$1,016	\$1,044	\$1,073
At US Median Rates	\$739	\$761	\$784	\$806	\$828
At Pennsylvania Rates	\$1,236	\$1,273	\$1,311	\$1,348	\$1,385

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

An additional 18 pari-mutuels outside of Miami-Dade and Broward counties would yield another \$36 million in license fees and \$4.5 million in regulatory fees.

Under this scenario, we believe it is reasonable to expect the additional 18 pari-mutuel casinos throughout Florida would have net direct employment of 15,572 FTEs statewide. Under this scenario, we project a total of 34 casinos statewide would result in net direct employment of 26,710 FTEs.

Scenario I: Authorizing Limited Number of Casino Resorts in Broward/ Miami-Dade

The salient assumption under this scenario is there would be two destination resorts operating in Florida – one in Miami-Dade County and one in Broward County. Aside from the addition of two destination resorts, the remainder of the Florida casino landscape reflects current law/current administration (and inclusive of the assumed 2014 opening of Dania Jai-Alai), albeit with the addition of table games that may include roulette and craps games at all seven Seminole casinos. Exclusive of the addition of destination resorts, these assumptions are consistent, and have the same exceptions and exclusions, with the assumptions described in scenario A and B.

Under this scenario, we estimate there will be 30,573 slot machines and 831 table games (and 35,559 gaming positions) at 18 casinos. Assuming existing casinos do not add or subtract gaming positions from their counts as of June 30, 2013, under this scenario, Broward and Miami-Dade counties would have 77.9 percent of the total statewide gaming positions and Hillsborough County would have 16.5 percent, meaning casinos in three counties would have 94.4 percent of the statewide gaming positions. There still would be six counties in Florida with one or more casinos, as Miami-Dade and Broward counties would be home to 14 casinos.

1. Implications and Considerations

It is our understanding that if this scenario were implemented, revenue sharing per the Seminole Compact would be impacted. Specifically, revenue sharing would exclude net win generated at the Seminole Tribe’s Broward County facilities. Additionally, the Seminole Tribe’s Brighton and Big Cypress location would be authorized to conduct table games.

Destination resort gaming restricted to Broward and Miami-Dade could provide a desirable combination of economic benefits via expansion while minimizing the negative consequences because gaming already is prominent in South Florida. Such resorts could place Florida in the “major leagues” of casino gambling. Depending on the quality, location and marketing of the destination resort(s), the state could immediately become a major international competitor for the ultra-high-end traveler who includes casino gambling as part of his/her entertainment experience. In this regard, Florida could compete with Las Vegas, Macau and other world-class casino markets for the highest-stakes players.

Destination resorts can also leverage the existing natural resources (ocean and beaches) and the state’s considerable tourism infrastructure.

Spectrum first studied the concept of adding destination resorts in Florida in 2011, under contract with potential private operators. Our findings then were consistent with what we have reported here. Back then, we determined that three destinations in the Miami-Dade and Broward areas could generate annual GGR between \$1.67 billion and \$2.17 billion. We then had the benefit of identifying and examining specific marketing plans that would focus in certain geographic and demographic areas, including aggressive marketing and junket plans for Asian

and Latin American gamblers, as well as for gamblers visiting other US destinations, including Atlantic City and Las Vegas. With those marketing plans in mind, the potential revenues more than doubled to an effective range of between \$4.3 billion to \$5.9 billion. These projections were consistent with projections developed by another consulting firm, Union Gaming Analytics, which vetted our projections.⁷⁹

We cannot assume that such aggressive marketing plans would be in place – or that potential developers would have the wherewithal to execute on such plans – for purposes of these scenarios, but we note that skilled operators, armed with sufficient assets and optimal locations, can significantly grow gaming and non-gaming revenues.

The location and breadth of non-gaming amenities in such destination resorts, however, could pose threats to existing restaurants, hotels and entertainment options – particularly if the resorts failed to attract incremental out-of-market visitors (i.e., where destination resorts simply cannibalize discretionary spending already destined for existing Florida businesses).

Destination resorts also could threaten existing pari-mutuel slot operations. Although the current pari-mutuel slot patrons are viewed as neighborhood-loyal and convenience-driven in terms of choosing “their” place to participate in gaming activities, the impact of authorizing two destination resorts in Miami-Dade and/or Broward counties could negatively impact pari-mutuel slot operations dependent on their physical location and relative attractiveness with respect to the local population. The opportunity for a higher-quality gaming facility – along with the opportunity to earn player rewards such as hotel stays, gourmet meals and show tickets – could be an incentive influencing the switching behavior of some patrons.

The authorizing of casino resort style gaming could be an immediate competitive threat to the Seminole-owned casinos, which could result in those properties providing a lower-cost experience for their patrons – both locals and prospective visitors. It also could prompt their properties to further improve/expand their offerings to compete with the big-box resorts. Such responses by the Seminole casinos, however, also could place further pressure on the existing pari-mutuels.

From a qualitative perspective, adding destination resort gambling could change visitor perceptions regarding Florida’s family-friendly image.

The addition of two destination resorts having both slots and table games would add logistical concerns regarding the cost of regulation, as per our assumption set these two additional casinos would add 7,600 slots and 400 table games to Florida’s commercial casino landscape.

⁷⁹ Resorts World America/Genting press release, November 16, 2011;
<http://www.rwmiami.com/images/News/press-releases/SpectrumUnionPressRelease.pdf>.

2. GGR and Related Projections (Scenario I)

Under this scenario, we project two destination resorts could collectively generate \$1.056 billion in GGR annually from 10,000 gaming positions. We project total slot revenue of \$802.4 million from 7,600 slot machines and total table revenue of \$253.4 million from 400 table games. Additionally, we project gross non-gaming revenue of \$480.5 million stemming from on-site hotel rooms/related, food and beverage, as well as from other non-gaming activities at two resorts (\$240.2 million annually per location).

We project the eight pari-mutuels in Miami-Dade and Broward counties would generate \$389.7 million of gross slot revenue – a 39.9 percent reduction in GGR from the Baseline scenario. Additionally, under this scenario and with the current number of slot machines by location, the range in daily win per slot would be \$86 to \$152 – so some locations may no longer be economically viable and/or may have to reduce the number of slot machines to match the reduction in demand.

Combined, we project the two destination resorts and eight pari-mutuels in Miami-Dade and Broward counties could generate \$1.446 billion in GGR, with \$1.192 billion of gross slot revenue and \$253.4 million of total table games revenue. From this, we assume taxable GGR would be \$1.326 billion. This level of revenue would result in revenue due to the State as follows:

- \$464.2 million under the current 35 percent tax rate.
- \$358.1 million at the US median effective GGR tax rate of 27 percent.
- \$609.8 million at the effective rate(s) in Pennsylvania.⁸⁰

We estimate the eight Native American casinos would have \$1.75 billion of GGR.

In total, we project statewide GGR from a total combination of 18 pari-mutuel, Native American, and destination resort casinos would be \$3.195 billion. A summary of this scenario:

Figure 57: Scenario I - Authorizing Casino Resorts in Broward/Miami-Dade, landscape and projections

Florida Casinos	Authorizing two destination resorts in Miami-Dade and/or Broward counties				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	8	8	2	18	2	12.5%
# Counties	2	6	2	6	0	0.0%
# Slots	8,409	14,564	7,600	30,573	7,600	33.1%
# Table Games	0	431	400	831	831	n/a
# Gaming Positions	8,409	17,150	10,000	35,559	12,586	54.8%
GGR (\$M)	\$389.7	\$1,749.5	\$1,055.7	\$3,195.0	\$739.2	30.1%
GGR / Position / Day	\$127	\$279	\$289	\$246	(\$47)	-15.9%

Source: Spectrum Gaming Group

⁸⁰ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

Additionally, we project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be 23.1 percent; the rate for adults residing within a one-hour drive of a casino would be 32 percent and the rate would be 11.8 percent for beyond a one-hour drive.

3. Economic/Fiscal Impacts (Scenario I)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario I includes three years of construction starting in the first year and does include Compact revenues but excludes the facilities in Broward County from the revenue-sharing calculation. The economic impacts rise sharply in the first years which only reflect construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 15,854 and Gross State Product is \$1.7 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US and Pennsylvania rate simulations. The US rates simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$228.1 million under the US median gaming tax rates to \$309.1 million under the Pennsylvania gaming tax rates.

Figure 58: Scenario I, casino resorts in Broward/Miami-Dade – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	18,451	17,927	16,898	15,854	15,261	14,836
Gross State Product	\$1,240	\$1,252	\$1,220	\$1,664	\$1,673	\$1,695
Gaming Taxes	\$0.05	\$0.11	\$0.11	\$155.02	\$314.90	\$324.93
Sales/Use Tax	\$11.75	\$24.59	\$26.15	\$25.90	\$25.65	\$26.54
Lottery	\$1.52	\$2.93	\$2.58	(\$0.49)	(\$3.32)	(\$3.44)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$7.98	\$18.29	\$20.96	\$22.00	\$22.73	\$23.80
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	14,529	14,310	14,149	14,050	15,854	
Gross State Product	\$1,727	\$1,767	\$1,811	\$1,861	\$1,664	
Gaming Taxes	\$335.00	\$344.98	\$354.86	\$364.68	\$155.02	
Sales/Use Tax	\$27.56	\$28.72	\$29.95	\$31.22	\$25.90	
Lottery	(\$3.53)	(\$3.59)	(\$3.61)	(\$3.61)	(\$0.49)	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$24.78	\$25.76	\$26.65	\$27.48	\$22.00	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 59: Scenario I, casino resorts in Broward/Miami-Dade – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	18,454	17,930	16,899	15,147	14,785	14,557
Gross State Product	\$1,240	\$1,253	\$1,221	\$1,606	\$1,635	\$1,676
Gaming Taxes	\$0.04	\$0.08	\$0.09	\$119.43	\$242.64	\$250.45
Sales/Use Tax	\$11.75	\$24.59	\$26.16	\$25.28	\$24.48	\$25.55
Lottery	\$1.52	\$2.93	\$2.59	\$0.67	(\$1.03)	(\$1.11)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$7.99	\$18.30	\$20.96	\$21.45	\$21.69	\$22.86
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	14,408	14,312	14,242	14,224	15,147	
Gross State Product	\$1,724	\$1,778	\$1,834	\$1,896	\$1,606	
Gaming Taxes	\$258.26	\$266.00	\$273.66	\$281.27	\$119.43	
Sales/Use Tax	\$26.76	\$28.11	\$29.50	\$30.92	\$25.28	
Lottery	(\$1.17)	(\$1.19)	(\$1.20)	(\$1.18)	\$0.67	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$23.97	\$25.10	\$26.13	\$27.10	\$21.45	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 60: Scenario I, casino resorts in Broward/Miami-Dade – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	18,452	17,930	16,903	16,301	15,607	15,064
Gross State Product	\$1,240	\$1,252	\$1,221	\$1,700	\$1,700	\$1,711
Gaming Taxes	\$0.07	\$0.16	\$0.17	\$177.39	\$360.24	\$371.61
Sales/Use Tax	\$11.75	\$24.59	\$26.16	\$26.29	\$26.41	\$27.23
Lottery	\$1.52	\$2.93	\$2.59	(\$1.16)	(\$4.65)	(\$4.79)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$7.99	\$18.29	\$20.96	\$22.36	\$23.41	\$24.45
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	14,663	14,370	14,148	14,001	16,301	
Gross State Product	\$1,734	\$1,766	\$1,803	\$1,848	\$1,700	
Gaming Taxes	\$383.04	\$394.38	\$405.62	\$416.78	\$177.39	
Sales/Use Tax	\$28.15	\$29.22	\$30.35	\$31.52	\$26.29	
Lottery	(\$4.90)	(\$4.97)	(\$5.01)	(\$5.01)	(\$1.16)	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$25.38	\$26.28	\$27.09	\$27.83	\$22.36	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 61: Scenario I, casino resorts in Broward/Miami-Dade – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$290	\$284	\$293	\$303	\$313
At US Median Rates	\$223	\$219	\$226	\$234	\$241
At Pennsylvania Rates	\$334	\$322	\$333	\$343	\$354
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$323	\$333	\$342	\$352	\$362
At US Median Rates	\$249	\$257	\$264	\$271	\$279
At Pennsylvania Rates	\$366	\$377	\$388	\$399	\$410

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Under this scenario, we believe it is reasonable to expect the creation/addition of two destination resorts in southern Florida would result in net, direct employment of 7,618 FTEs. Under this scenario, we project Florida's 16 casinos would yield net direct employment of 17,806 FTEs.

4. GGR and Related Projections (with Option to End Pari-Mutuel Live Events, Scenario I-1)

In this sub-scenario, pari-mutuel facilities would be permitted to end live performances, with supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.

GGR projections (to determine fiscal impacts) for this scenario mimic our projections per Scenario I. However, in addition to aforementioned revenue-due-to-the-State figures, we project \$31.2 million would need to be generated for purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the rate to generate such purse subsidies would be 2.16 percent under this scenario; however, this rate would be 2.35 percent based on taxable GGR.

5. Economic/Fiscal Impacts (with Option to End Pari-Mutuel Live Events, Scenario I-1)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget. (See Chapter I[H] for methodology detail.) This combination scenario captures the effects of a reduction in live racing in addition to the changes introduced in Scenario I but excludes the facilities in Broward County from the revenue sharing calculation. This scenario includes three years of construction starting in the first year and does include Compact revenues. The economic impacts rise sharply in the first years which only reflect construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 15,402 and Gross State Product is \$1.7 billion under the Default Budget. Where the employment and Gross State

Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US median gaming tax and Pennsylvania gaming tax rates simulations. The US median gaming tax rate simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$227 million under the US median gaming tax rates to \$308 million under the Pennsylvania gaming tax rates.

Figure 62: Scenario I-1, two destination resorts in Broward/Miami-Dade and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	17,982	17,457	16,437	15,402	14,818	14,399
Gross State Product	\$1,231	\$1,243	\$1,212	\$1,655	\$1,665	\$1,687
Gaming Taxes	\$0.04	\$0.08	\$0.08	\$154.99	\$314.86	\$324.90
Sales/Use Tax	\$11.52	\$24.09	\$25.59	\$25.29	\$25.00	\$25.85
Lottery	\$1.50	\$2.89	\$2.55	(\$0.52)	(\$3.34)	(\$3.46)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$7.92	\$18.09	\$20.66	\$21.63	\$22.30	\$23.33
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	14,096	13,879	13,719	13,622	15,402	
Gross State Product	\$1,719	\$1,759	\$1,803	\$1,853	\$1,655	
Gaming Taxes	\$334.97	\$344.95	\$354.83	\$364.65	\$154.99	
Sales/Use Tax	\$26.83	\$27.95	\$29.13	\$30.35	\$25.29	
Lottery	(\$3.54)	(\$3.60)	(\$3.62)	(\$3.62)	(\$0.52)	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$24.27	\$25.22	\$26.07	\$26.87	\$21.63	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 63: Scenario I-1, two destination resorts in Broward/Miami-Dade and reduction in pari-mutuel events – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	17,982	17,460	16,438	14,696	14,341	14,122
Gross State Product	\$1,231	\$1,243	\$1,212	\$1,597	\$1,627	\$1,668
Gaming Taxes	\$0.03	\$0.06	\$0.06	\$119.41	\$242.62	\$250.42
Sales/Use Tax	\$11.52	\$24.09	\$25.60	\$24.67	\$23.84	\$24.86
Lottery	\$1.50	\$2.89	\$2.55	\$0.65	(\$1.05)	(\$1.13)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$7.92	\$18.09	\$20.67	\$21.08	\$21.27	\$22.39
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	13,972	13,880	13,813	13,794	14,696	
Gross State Product	\$1,715	\$1,770	\$1,826	\$1,887	\$1,597	
Gaming Taxes	\$258.24	\$265.98	\$273.64	\$281.24	\$119.41	
Sales/Use Tax	\$26.04	\$27.34	\$28.69	\$30.08	\$24.67	
Lottery	(\$1.18)	(\$1.21)	(\$1.21)	(\$1.20)	\$0.65	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$23.47	\$24.56	\$25.56	\$26.51	\$21.08	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 64: Scenario I-1, two destination resorts in Broward/Miami-Dade and reduction in pari-mutuel events – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	17,979	17,459	16,439	15,849	15,163	14,626
Gross State Product	\$1,231	\$1,243	\$1,212	\$1,691	\$1,692	\$1,703
Gaming Taxes	\$0.05	\$0.12	\$0.12	\$177.35	\$360.19	\$371.57
Sales/Use Tax	\$11.52	\$24.10	\$25.60	\$25.68	\$25.77	\$26.54
Lottery	\$1.50	\$2.89	\$2.55	(\$1.19)	(\$4.67)	(\$4.81)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$7.92	\$18.09	\$20.66	\$21.98	\$22.98	\$23.97
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	14,227	13,936	13,719	13,572	15,849	
Gross State Product	\$1,725	\$1,758	\$1,795	\$1,839	\$1,691	
Gaming Taxes	\$382.99	\$394.33	\$405.57	\$416.74	\$177.35	
Sales/Use Tax	\$27.42	\$28.44	\$29.53	\$30.66	\$25.68	
Lottery	(\$4.91)	(\$4.98)	(\$5.02)	(\$5.03)	(\$1.19)	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$24.86	\$25.73	\$26.52	\$27.24	\$21.98	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 65: Scenario I-1, two destination resorts in Broward/Miami-Dade and reduction in pari-mutuel events – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$290	\$284	\$293	\$303	\$313
At US Median Rates	\$223	\$219	\$226	\$234	\$241
At Pennsylvania Rates	\$334	\$322	\$333	\$343	\$354
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$323	\$333	\$342	\$352	\$362
At US Median Rates	\$249	\$257	\$264	\$271	\$279
At Pennsylvania Rates	\$366	\$377	\$388	\$399	\$410

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Scenario J: Authorizing Limited Number of Casino Resorts Statewide

The salient assumption under this scenario is there would be a total of six destination resorts operating in Florida. Based on the same exceptions and exclusions described in Scenario I above, we continue to assume two destination resorts will be located in southern Florida (one in Miami-Dade County and one in Broward County) – as these two counties are home to more than one out of every five Florida residents.

Of the remaining (and assumed) four destination resorts in Florida, we assume one destination resort will be located in each of the top four most-populated MSAs (inclusive of the Miami-Fort Lauderdale-West Palm Beach MSA), as follows:

- We assume one additional destination resort in the Miami-Fort Lauderdale-West Palm Beach MSA would be located within Palm Beach County (which would mean, of the three destination resorts within this MSA, there would be one in each of the counties comprising the MSA).
- Of the remaining (and assumed) three destination resorts in Florida, we assume one destination resort will be located in each of the next three most-populated MSAs, in or around Tampa, Orlando and Jacksonville, respectively.

Under this scenario, we estimate there will be 45,773 slot machines and 1,631 table games (and 55,559 gaming positions) at 22 casinos throughout Florida. Assuming existing casinos do not add or subtract gaming positions from their counts as of June 30, 2013, under this scenario, Broward and Miami-Dade counties would have 49.9 percent of the total statewide gaming positions and Hillsborough County would have 19.6 percent, meaning casinos in three counties would have 69.5 percent of the statewide gaming positions. Under this scenario, there would be nine counties in Florida with one or more casinos, as there would be multiple casinos in Hillsborough, Miami-Dade and Broward counties.

Currently, of the existing 15 casinos, 56 percent of Florida adults are within a one-hour drive of a Florida casino, while 81.4 percent are within a two-hour drive. However, with six destination resorts throughout the state, 80 percent of Florida adults would be within a one-hour drive of Florida casino, while 92 percent would be within a two-hour drive. To put it another way, nearly 3.45 million more Florida adults would be within a one-hour drive of a Florida casino under such expansion (from 8.1 million adults currently to 11.6 million adults with 22 casinos statewide).

There are no out-of-state adults (i.e., non-Floridians) within a one- or two-hour drive of an existing Florida casino. However, under this expansion scenario, there would be 14,000 out-of-state adults (from Georgia) within a one-hour drive of a Florida casino, while there would be 216,000 out-of-state adults (from Georgia) within a two-hour drive.

1. Implications and Considerations

It is our understanding that if this scenario were implemented, all revenue sharing per the Seminole Compact would end. Additionally, the Seminole Tribe's Brighton and Big Cypress location would be authorized to conduct table games.

All of the Implications and Considerations directly related to the addition of destination resorts, as noted in Scenario I (excluding revenue sharing impact) also apply to this Scenario, as well the following:

As noted in Spectrum's first report, many business leaders in the Orlando area fear that any quantifiable revenue gains to the State by placing a casino in that region could have significant ramifications for Orlando's family-friendly brand, which could reduce or negate any of those financial gains. While there is no reliable way to quantify such concerns, we suggest they have significant validity. We noted on p. 24 of that report: "Orlando's strength in attracting business travelers is growing without gaming, and that absence is to some degree fueling that growth. Orlando has carved out a significant, profitable niche in that national market, and gaming would clearly be antithetical to that image and its ability to dominate that important segment."⁸¹

The addition of six destination resorts having both slots and table games would add logistical concerns regarding the cost of regulation, as per our assumption set these six additional casinos would add 22,800 slots and 1,200 table games to Florida's commercial casino landscape. Additionally, three of the destination resorts would be widely dispersed statewide (i.e., in areas where there are currently no existing commercial casinos, outside of southeastern Florida).

⁸¹ Spectrum Gaming Group, "Gambling Impact Study: Part 1, Section A: Assessment of the Florida Gaming Industry and its Economic Effects," July 1, 2013. P. 24

2. GGR and Related Projections

Under this scenario, we project six destination resorts could collectively generate \$3.32 billion in GGR annually from 30,000 gaming positions. We project total slot revenue of \$2.525 billion from 22,800 slot machines and total table revenue of \$797.4 million from 1,200 table games. Additionally, we project gross non-gaming revenue of \$1.441 billion stemming from on-site hotel rooms/related, food and beverage, as well as from other non-gaming activities occurring at each location.

We project the eight pari-mutuels in Miami-Dade and Broward counties would generate \$355.9 million of gross slot revenue – which would be a 45.1 percent reduction in GGR for these casinos from what may otherwise occur (per the Baseline scenario). Additionally, under this scenario and with current number of slot machines by location, the range in slot revenue per unit per day would be \$77 to \$142 – so some locations may no longer be economically viable and/or may have to reduce the number of slot machines accordingly to match the reduction in demand/patrons.

Combined, we project the six destination resorts statewide, along with the eight pari-mutuels in Miami-Dade and Broward counties, could generate \$3.678 billion in GGR, with \$2.881 billion of gross slot revenue and \$797.4 million of total table games revenue. From this, we assume taxable GGR would be \$3.39 billion. This level of revenue would result in revenue due to the State as follows:

- \$1.187 billion under the current 35 percent tax rate.
- \$915.4 million at the US median effective GGR tax rate of 27 percent.
- \$1.496 billion at the effective rate(s) in Pennsylvania.⁸²

We estimate the eight Native American casinos would have \$1.104 billion of combined slot and table games revenue. In total, we project statewide GGR (from a total combination of 22 pari-mutuel, Native American and destination resort casinos in Florida) would be \$4.783 billion. A summary of this scenario is in the following table:

⁸² See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

Figure 66: Scenario J – Six destination resorts statewide, landscape and projections

Florida Casinos	Authorizing a limited number of casino/resort complexes around the State				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	8	8	6	22	6	37.5%
# Counties	2	6	6	9	3	50.0%
# Slots	8,409	14,564	22,800	45,773	22,800	99.2%
# Table Games	0	431	1,200	1,631	1,631	n/a
# Gaming Positions	8,409	17,150	30,000	55,559	32,586	141.8%
GGR (\$M)	\$355.9	\$1,104.4	\$3,322.5	\$4,782.8	\$2,327.1	94.8%
GGR / Position / Day	\$116	\$176	\$303	\$236	(\$57)	-19.5%

Source: Spectrum Gaming Group

Additionally, we project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be 28.7 percent, while this rate for adults residing within a one-hour drive of a casino would be 33.9 percent and the rate would be 22 percent for those living beyond a one-hour drive of a casino.

3. Economic/Fiscal Impacts

Next, we determine the economic impacts of these scenarios using the REMI Tax-PI model, using the Default Budget and three different tax rates (see Chapter I[H] for methodology detail). Scenario J includes three years of construction starting in the first year and does not include Compact revenues. The economic impacts rise sharply in the first years which only reflect construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector. Over the course of the simulation, the average employment is 42,195 and Gross State Product is \$4.7 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US median gaming tax rate and Pennsylvania gaming tax rates simulations. The US median gaming tax rate simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$743.3 million under the US median gaming tax rate to \$1.1 billion under the Pennsylvania gaming tax rates.

Figure 67: Scenario J, six casino resorts statewide – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/ FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	55,351	53,766	50,671	42,195	40,764	39,802
Gross State Product	\$3,718	\$3,756	\$3,662	\$4,710	\$4,744	\$4,819
Gaming Taxes	\$0.15	\$0.32	\$0.33	\$583.55	\$1,185.56	\$1,223.54
Sales/Use Tax	\$35.26	\$73.78	\$78.47	\$74.84	\$71.04	\$73.33
Lottery	\$4.56	\$8.80	\$7.75	\$2.57	(\$2.08)	(\$2.52)
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$23.96	\$54.88	\$62.87	\$64.22	\$64.50	\$67.23
At Default Budget/ FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	39,158	38,756	38,483	38,372	42,195	
Gross State Product	\$4,923	\$5,051	\$5,189	\$5,345	\$4,710	
Gaming Taxes	\$1,261.60	\$1,299.31	\$1,336.66	\$1,373.74	\$583.55	
Sales/Use Tax	\$76.16	\$79.48	\$83.04	\$86.75	\$74.84	
Lottery	(\$2.80)	(\$2.95)	(\$3.03)	(\$3.02)	\$2.57	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$69.93	\$72.75	\$75.37	\$77.88	\$64.22	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 68: Scenario J, six casino resorts statewide – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	55,351	53,768	50,673	39,542	40,075	39,854
Gross State Product	\$3,718	\$3,756	\$3,662	\$4,494	\$4,698	\$4,847
Gaming Taxes	\$0.12	\$0.25	\$0.27	\$449.67	\$976.07	\$1,006.81
Sales/Use Tax	\$35.26	\$73.78	\$78.47	\$72.50	\$67.52	\$71.48
Lottery	\$4.56	\$8.80	\$7.76	\$7.00	\$6.76	\$6.55
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$23.96	\$54.88	\$62.88	\$62.10	\$61.03	\$64.88
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	39,771	39,795	39,837	39,965	39,542	
Gross State Product	\$5,012	\$5,191	\$5,374	\$5,568	\$4,494	
Gaming Taxes	\$1,037.85	\$1,068.46	\$1,098.36	\$1,127.42	\$449.67	
Sales/Use Tax	\$75.21	\$79.35	\$83.67	\$88.05	\$72.50	
Lottery	\$6.38	\$6.32	\$6.31	\$6.35	\$7.00	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$68.31	\$71.88	\$75.17	\$78.32	\$62.10	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 69: Scenario J, six casino resorts statewide – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	55,351	53,773	50,677	44,635	42,517	40,886
Gross State Product	\$3,718	\$3,757	\$3,663	\$4,909	\$4,883	\$4,896
Gaming Taxes	\$0.22	\$0.47	\$0.50	\$706.02	\$1,434.03	\$1,479.50
Sales/Use Tax	\$35.27	\$73.79	\$78.48	\$77.00	\$75.13	\$76.91
Lottery	\$4.56	\$8.80	\$7.76	(\$1.30)	(\$9.71)	(\$10.25)
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$23.96	\$54.89	\$62.88	\$66.17	\$68.20	\$70.66
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	39,716	38,900	38,304	37,929	44,635	
Gross State Product	\$4,946	\$5,028	\$5,127	\$5,247	\$4,909	
Gaming Taxes	\$1,525.15	\$1,570.42	\$1,615.31	\$1,659.90	\$706.02	
Sales/Use Tax	\$79.12	\$81.85	\$84.86	\$88.04	\$77.00	
Lottery	(\$10.65)	(\$10.90)	(\$11.05)	(\$11.08)	(\$1.30)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$72.96	\$75.30	\$77.48	\$79.50	\$66.17	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 70: Scenario J, six casino resorts statewide – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$1,056	\$1,075	\$1,109	\$1,145	\$1,182
At US Median Rates	\$815	\$829	\$856	\$883	\$912
At Pennsylvania Rates	\$1,274	\$1,292	\$1,333	\$1,376	\$1,421
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$1,220	\$1,257	\$1,294	\$1,330	\$1,367
At US Median Rates	\$941	\$969	\$998	\$1,026	\$1,054
At Pennsylvania Rates	\$1,466	\$1,511	\$1,555	\$1,599	\$1,642

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

If each destination resort were required to pay other fees that existing pari-mutuel licensees with slots pay (i.e., as-is under current law/current administration), then the opening, and consequent operation, of six destination resorts would result in additional, annually recurring license fees of \$12 million and regulatory fees of \$1.5 million.

Under this scenario, we believe it is reasonable to expect the creation/addition of six destination resorts throughout Florida would result in net, direct employment of 23,586 FTEs. Under this scenario, we project Florida’s 22 casinos would yield net direct employment of 30,708 FTEs.

Scenario K: Broward/Miami-Dade Pari-Mutuels have Table Games, Resort Casinos in Broward/Miami-Dade, Renewal of Seminole Compact (and Option to End Pari-Mutuel Live Events)

Under this scenario, pari-mutuel facilities would be permitted to end live performances, with supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.

The salient assumptions under this scenario:

- There would be two destination resorts operating in Florida – one in Miami-Dade County and one in Broward County (based on same exceptions and exclusions described in Scenario I).
- Existing pari-mutuel facilities with slots (inclusive of Dania Jai-Alai) would be authorized to conduct table games or other Class III games.
- The addition of table games that may include roulette and craps at all seven Seminole casinos.

1. Implications and Considerations

It is our understanding that if this scenario were implemented, revenue sharing per the Seminole Compact would be impacted. Specifically, revenue sharing would exclude net win generated at the Seminole Tribe's Broward county facilities.

All of the Implications and Considerations directly related to the addition of destination resorts, as noted in Scenario I (excluding revenue sharing impact) also apply to this Scenario, as well the following:

This scenario concentrates full-blown casino gambling in South Florida, with the potential for 10 full-service casinos in the market. As such, there would be the opportunity to market South Florida as a gambling destination, one that could compete with Las Vegas and other fly-in gambling markets. Such marketing, however, could be at odds with the family-friendly tourism promotions that dominate advertising and marketing statewide.

A key issue would be tax parity: Would the destination resorts pay the same tax on GGR as the pari-mutuels would on their slot and table revenue? If not, there could be a competitive and potentially unfair imbalance; if so, the pari-mutuels may be encouraged to make substantial capital improvements to compete with the new destination resorts, which could result in significant gains in construction and permanent operational jobs.

By renewing the Seminole Compact and allowing house-banked table games, the Seminole casinos would retain their ability to compete effectively with all gaming entrants in the marketplace.

The scale of such expansion would add logistical concerns regarding the cost of regulation. This would occur due to the increased need for oversight of table games operations at existing pari-mutuel locations with slots in combination with the need to regulate two additional casinos that would add a total of 7,600 slots and 400 table games to Florida's commercial casino landscape.

2. GGR and Related Projections (with Option to End Pari-Mutuel Live Events)

Under this scenario, we project two destination resorts in Miami-Dade and Broward counties could collectively generate \$1.031 billion in GGR annually from 10,000 gaming positions. We project total slot revenue of \$783.5 million from 7,600 slot machines and total table revenue of \$247.4 million from 400 table games. Additionally, we project gross non-gaming revenue of \$480.5 million stemming from on-site hotel rooms/related, food and beverage, as well as from other non-gaming activities occurring at each location.

We project the eight pari-mutuel locations in Miami-Dade and Broward counties would generate \$483 million – a 25.5 percent reduction in GGR for these casinos from what may otherwise occur (per the Baseline scenario). Of this GGR, we project \$409.9 million of gross slot revenue and \$73.1 million in gross table games revenue. Additionally, under this scenario and with current number of slot machines by location, the range in slot revenue per unit per day would be \$90 to \$160 – so some locations may no longer be economically viable and/or may have to reduce number of slot machines accordingly to match the reduction in demand/patrons.

Combined, we project the two destination resorts and eight pari-mutuel locations in Miami-Dade and Broward counties could generate \$1.514 billion in GGR, with \$1.193 billion of gross slot revenue and \$320.5 million of total table games revenue. From this we assume taxable GGR would be \$1.395 billion. This level of revenue would result in revenue due to the state as follows:

- \$488.1 million under the current 35 percent tax rate.
- \$376.5 million at the US median effective GGR tax rate of 27 percent.
- \$618.4 million at the effective rate(s) in Pennsylvania.⁸³

In addition to the aforementioned revenue due to the state, we project \$31.2 million would need to be generated for purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the rate to generate such purse subsidies would be 2.06 percent under this scenario; however, this rate would be 2.24 percent based on taxable GGR.

⁸³ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

We estimate the eight Native American casinos would have \$1.725 billion of combined slot and table games revenue.

In total, we project statewide GGR (from a total combination of 18 pari-mutuel, Native American and destination resort casinos in Florida) would be \$3.239 billion. A summary of this scenario is in the following table:

Figure 71: Scenario K - Broward/Miami-Dade pari-mutuels have table games, resort casinos in Broward/Miami-Dade, renewal of Seminole Compact; landscape and projections

Florida Casinos	Broward/Miami-Dade pari-mutuels w/ table games and casino resort complexes in Broward/Miami-Dade				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	8	8	2	18	2	12.5%
# Counties	2	6	2	6	0	0.0%
# Slots	8,409	14,564	7,600	30,573	7,600	33.1%
# Table Games	250	431	400	1,081	1,081	n/a
# Gaming Positions	9,909	17,150	10,000	37,059	14,086	61.3%
GGR (\$M)	\$483.0	\$1,725.4	\$1,030.9	\$3,239.3	\$783.5	31.9%
GGR / Position / Day	\$134	\$276	\$282	\$239	(\$53)	n/a

Source: Spectrum Gaming Group

We project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be approximately 23.1 percent, while the rate for adults residing within a one-hour drive of a casino location would be 32 percent and the rate would be 11.8 percent for those living beyond a one-hour drive of a casino location.

3. Economic/Fiscal Impacts (with Option to End Pari-Mutuel Live Events)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget. (See Chapter I[H] for methodology detail.) This scenario includes three years of construction starting in the first year and does include Compact revenues but excludes the facilities in Broward County from the revenue-sharing calculation. The economic impacts rise sharply in the first years which only reflect construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 15,049 and Gross State Product is 1.6 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US median gaming tax rate and Pennsylvania gaming tax rates simulations. The US median gaming tax rate simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range

from an average of \$284 million under the US median gaming tax rate to 357.1 million under the Pennsylvania gaming tax rates.

Figure 72: Scenario K, table games at Broward/Miami-Dade pari-mutuels and two destination resorts in Broward/Miami-Dade and renewal of Seminole Compact and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,824	53,017	49,560	15,046	13,484	13,083
Gross State Product	\$4,646	\$3,653	\$3,522	\$1,601	\$1,506	\$1,511
Gaming Taxes	\$0.17	(\$0.44)	(\$1.24)	\$168.59	\$343.84	\$354.77
Sales/Use Tax	\$43.92	\$82.88	\$78.86	\$57.33	\$33.41	\$31.37
Lottery	\$5.69	\$10.13	\$8.12	\$1.33	(\$4.66)	(\$4.69)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$29.93	\$61.76	\$64.03	\$52.87	\$38.39	\$35.12
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	13,091	13,298	13,576	13,889	15,046	
Gross State Product	\$1,559	\$1,631	\$1,714	\$1,806	\$1,601	
Gaming Taxes	\$365.76	\$376.66	\$387.47	\$398.20	\$168.59	
Sales/Use Tax	\$30.92	\$31.40	\$32.45	\$33.86	\$57.33	
Lottery	(\$4.62)	(\$4.50)	(\$4.36)	(\$4.19)	\$1.33	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$33.59	\$32.88	\$32.73	\$32.91	\$52.87	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 73: Scenario K, table games at Broward/Miami-Dade pari-mutuels and two destination resorts in Broward/Miami-Dade and renewal of Seminole Compact and reduction in pari-mutuel events – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,824	53,018	49,564	14,273	12,960	12,776
Gross State Product	\$4,646	\$3,653	\$3,523	\$1,538	\$1,464	\$1,490
Gaming Taxes	\$0.14	(\$0.37)	(\$1.03)	\$129.87	\$265.00	\$273.50
Sales/Use Tax	\$43.92	\$82.89	\$78.87	\$56.65	\$32.13	\$30.29
Lottery	\$5.69	\$10.13	\$8.12	\$2.60	(\$2.16)	(\$2.15)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$29.93	\$61.76	\$64.04	\$52.27	\$37.25	\$34.09
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	12,954	13,298	13,679	14,076	14,273	
Gross State Product	\$1,555	\$1,642	\$1,739	\$1,843	\$1,538	
Gaming Taxes	\$282.03	\$290.49	\$298.86	\$307.17	\$129.87	
Sales/Use Tax	\$30.05	\$30.73	\$31.96	\$33.56	\$56.65	
Lottery	(\$2.05)	(\$1.89)	(\$1.73)	(\$1.55)	\$2.60	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$32.70	\$32.15	\$32.16	\$32.50	\$52.27	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 74: Scenario K, table games at Broward/Miami-Dade pari-mutuels and two destination resorts in Broward/Miami-Dade and renewal of Seminole Compact and reduction in pari-mutuel events – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,826	53,015	49,552	15,311	13,715	13,247
Gross State Product	\$4,647	\$3,652	\$3,522	\$1,623	\$1,524	\$1,523
Gaming Taxes	\$0.26	(\$0.59)	(\$1.73)	\$181.87	\$371.29	\$383.02
Sales/Use Tax	\$43.93	\$82.89	\$78.85	\$57.56	\$33.88	\$31.81
Lottery	\$5.69	\$10.13	\$8.12	\$0.96	(\$5.40)	(\$5.44)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$8.43	\$17.12	\$17.67
All other Revenues	\$29.93	\$61.75	\$64.02	\$53.06	\$38.80	\$35.53
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	13,202	13,367	13,609	13,891	15,311	
Gross State Product	\$1,566	\$1,634	\$1,713	\$1,801	\$1,623	
Gaming Taxes	\$394.82	\$406.54	\$418.16	\$429.71	\$181.87	
Sales/Use Tax	\$31.32	\$31.75	\$32.75	\$34.11	\$57.56	
Lottery	(\$5.38)	(\$5.27)	(\$5.14)	(\$4.98)	\$0.96	
Compact Revenues	\$18.22	\$18.77	\$19.31	\$19.84	\$8.43	
All other Revenues	\$33.98	\$33.23	\$33.04	\$33.17	\$53.06	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 75: Scenario K, table games at Broward/Miami-Dade pari-mutuels and two destination resorts in Broward/Miami-Dade and renewal of Seminole Compact and reduction in pari-mutuel events – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$315	\$311	\$320	\$331	\$342
At US Median Rates	\$243	\$240	\$247	\$255	\$263
At Pennsylvania Rates	\$343	\$332	\$342	\$354	\$365
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$352	\$363	\$374	\$384	\$395
At US Median Rates	\$272	\$280	\$288	\$296	\$305
At Pennsylvania Rates	\$377	\$388	\$399	\$411	\$422

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

If each destination resort were required to pay other fees that existing pari-mutuel licensees with slots pay (i.e., as-is under current law/current administration), then the opening, and consequent operation, of two destination resorts would result in additional, annually recurring license fees of \$4 million and regulatory fees of \$500,000.

Under this scenario, we believe it is reasonable to expect the creation/addition of two destination resorts in southern Florida would result in net, direct employment of 7,501 FTEs. Under this scenario, we project Florida's 18 casinos would yield net direct employment of 18,560 FTEs.

Scenario L: Slots and Tables at Pari-Mutuels Statewide, Resort Casinos Statewide, Seminole Tribe has Full Gambling, Pari-Mutuels have Option to End Live Events

Under this scenario, pari-mutuel facilities would be permitted to end live performances, with supplementation of horse purses and awards calculated as percentage of statewide GGR, rather than by facility.

The salient assumptions under this scenario:

- There would be six destination resorts operating in Florida (based on same exceptions and exclusions described in Scenario J).
- Existing pari-mutuel facilities with slots (inclusive of Dania Jai-Alai) would be authorized to conduct table games or other Class III games.
- The 20 pari-mutuel locations outside of Miami-Dade and Broward counties could offer both slots and table games (or other Class III games).
- The addition of table games that may include roulette and craps at all seven Seminole casinos; however, revenue sharing under Compact ceases.

Under this scenario, there could be a total of 42 casino locations throughout Florida. However, based on assumptions utilized throughout this report, our modeling indicates that many locations would not be economically viable (that is each generating enough GGR to warrant 500 slot machines that would average at least \$200 in revenue per unit per day). Further assuming that the six destination resorts do materialize (at the \$2 billion per location threshold and having 5,000 gaming positions each), while existing operators maintain current gaming supply, then at least nine of the 20 pari-mutuel locations throughout the state (and outside of Miami-Dade and Broward counties) would not be economically viable.

1. Implications and Considerations

It is our understanding that if this scenario were implemented, all revenue sharing per the Seminole Compact would end.

All of the Implications and Considerations directly related to the addition of destination resorts, as noted in Scenario I (excluding revenue sharing impact) also apply to this Scenario, as well the following:

This is effectively a “wide-open” scenario that could result in Florida having more casinos than all but five states (Nevada 269, Oklahoma 117, California 68, South Dakota, 48, Colorado 43⁸⁴). There could be saturation in certain markets and the viability of some prospective operations would be in doubt. The presence of so many casinos would make them highly visible throughout the state and potentially change the perception of Florida among some visitors. Tourism-related agencies and groups would need to consider whether to include casinos as part of their marketing campaigns.

The State would need to address the regulatory structure to effectively regulate up to 34 commercial casinos (as it is unlikely all 42 potential casino locations would be economically viable, due primarily to saturation in certain markets).

As noted in Scenario H, the revenue generated by slot machines and table games statewide could provide a valuable funding source for racing purses and improved racing facilities, if operators were required to supplement purses, as demonstrated with the South Florida racinos and in other racino states. This could in turn enable the host pari-mutuel facilities to attract more and higher-quality horses and jockeys (and greyhounds), which would flow through to benefit trainers and breeders. However – as results in other racino states have shown – a higher-quality racing product does not necessarily translate into higher handle/increased popularity for the racing industry, as this activity is in decline nationwide.

As noted in Chapter I[E][3], the addition of slot machines may positively impact cardroom revenues. The cardrooms may also benefit from crossover between poker players and blackjack players. The capital improvements required to add slot machines and table games may

⁸⁴ Counts as of 2012 for commercial casinos, 2011 for Indian casinos.

require, or at least encourage, the host racetrack to simultaneously upgrade its cardroom, which could make it more popular with patrons.

As noted in Scenario K, a key issue would be tax parity: Would the destination resorts pay the same tax on GGR as the pari-mutuels would on their slot and table revenue? If not, there could be a competitive and potentially unfair imbalance; if so, the pari-mutuels may be encouraged to make substantial capital improvements to compete with the new destination resorts, which could result in significant gains in construction and permanent operational jobs. At the same time, we note that the Seminole casinos would retain their ability to compete effectively with all gaming entrants in the marketplace.

The scale of such expansion would add logistical concerns regarding the cost of regulation. This would occur due to the increased need for oversight of table games operations at existing pari-mutuel locations in Broward and Miami-Dade counties coupled with the oversight of both slots and table games at up to 20 additional locations that would be widely dispersed statewide. In addition to logistical concerns with gaming expansions at pari-mutuel locations statewide, there would be six destination resorts that would add 22,800 slots and 1,200 table games to Florida's commercial casino landscape, while three of the destination resorts would be widely dispersed statewide (i.e., in areas where there are currently no existing commercial casinos, outside of southeastern Florida).

2. GGR and Related Projections (Minimizing Cannibalization, Pari-Mutuels have Option to End Live Events, Scenario L-1)

Under this scenario, we project six destination resorts could collectively generate \$3.161 billion in GGR annually from 30,000 gaming positions. We project total slot revenue of \$2.4 billion from 22,800 slot machines and total table revenue of \$758.5 million from 1,200 table games. Additionally, we project gross non-gaming revenue of \$1.44 billion stemming from on-site hotel rooms/related, food and beverage, as well as from other non-gaming activities occurring at each location.

Under this scenario, we project slot machines could be economically viable additions at only 11 of the 20 pari-mutuels outside of Miami-Dade and Broward counties. We project these 11 pari-mutuel locations could collectively generate \$732.4 million in GGR annually from 9,086 gaming positions. We project total slot revenue of \$620.7 million from 7,700 slot machines and total table revenue of \$111.7 million from 231 table games. Of the 11 locations, the average location would have 826 gaming positions (700 slots and 21 table games), while the median value in our result set is 590 gaming positions (500 slots and 15 table games). Furthermore, six locations would have the minimal amount of gaming positions (or 500 slots and 15 table games), while the largest would warrant 1,500 slots and 45 table games (1,770 gaming positions) per our modeling and assumptions utilized.

We project the eight pari-mutuel locations in Miami-Dade and Broward counties would generate \$441.7 million in GGR, with \$374.8 million of gross slot revenue and \$66.9 million of

total table games revenue - this would be a 31.9 percent reduction in GGR for these eight casinos from what may otherwise occur (per the Baseline scenario). Therefore, under this scenario, there would be 19 pari-mutuel locations with both slots and table games that could generate \$995.5 million of gross slot revenue and \$178.6 million of total table games revenue.

From the combination of destination resorts and casinos at pari-mutuel locations we assume taxable GGR would be \$4 billion. This level of revenue would result in “revenue due to the state” as follows:

- \$1.4 billion under the current 35 percent tax rate.
- \$1.079 billion at the US median effective GGR tax rate of 27 percent.
- \$1.763 billion at the effective rate(s) in Pennsylvania.⁸⁵

In addition to aforementioned revenue due to the state, we project \$31.2 million would need to be generated for purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the rate to generate such purse subsidies would be 0.72 percent under this scenario; however, this rate would be 0.78 percent based on taxable GGR.

We estimate the eight Native American casinos would have \$1.063 billion of combined slot and table games revenue.

In total, we project statewide GGR (from a total of 33 destination resort casinos, pari-mutuel, and/or Native American casinos in Florida) would be \$5.4 billion. A summary of this scenario is in the following table:

Figure 76: Scenario L-1 – six destination resorts, slots and tables at pari-mutuels statewide, Seminole casinos have full gambling; minimizing cannibalization; landscape and projections

Florida Casinos	Six casino resort complexes statewide, with slots/tables at pari-mutuels statewide - minimizing cannibalization				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	19	8	6	33	17	106.3%
# Counties	13	6	6	19	13	216.7%
# Slots	16,109	14,564	22,800	53,473	30,500	132.8%
# Table Games	481	431	1,200	2,112	2,112	n/a
# Gaming Positions	18,995	17,150	30,000	66,145	43,172	187.9%
GGR (\$M)	\$1,174.1	\$1,063.0	\$3,160.5	\$5,397.6	\$2,941.9	119.8%
GGR / Position / Day	\$169	\$170	\$289	\$224	(\$69)	-23.7%

Source: Spectrum Gaming Group

We project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be approximately 32.8 percent, while the rate for adults residing within a one-

⁸⁵ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

hour drive of a casino location would be 36.2 percent and the rate would be 28.5 percent for those living beyond a one-hour drive of a casino location.

3. Economic/Fiscal Impacts (Minimizing Cannibalization, Pari-mutuels have Option to End Live Events, Scenario L-1)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget. (See Chapter I[H] for methodology detail.) This scenario includes three years of construction starting in the first year and does not include Compact revenues. The economic impacts rise sharply in the first years which only reflect construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 52,493 and Gross State Product is \$5.6 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US median gaming tax rate and Pennsylvania gaming tax rates simulations. The US median gaming tax rates simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$947.6 million under the US median gaming tax rates to \$1.3 billion under the Pennsylvania gaming tax rates.

Figure 77: Scenario L-1 (minimizing cannibalization), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/ FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,824	57,584	54,109	52,493	50,995	49,836
Gross State Product	\$4,646	\$4,128	\$4,015	\$5,631	\$5,695	\$5,787
Gaming Taxes	\$0.17	\$2.76	\$5.24	\$712.83	\$1,443.26	\$1,489.50
Sales/Use Tax	\$43.92	\$85.15	\$83.77	\$84.78	\$86.49	\$90.04
Lottery	\$5.69	\$9.06	\$6.04	\$1.27	(\$3.02)	(\$3.53)
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$29.93	\$64.36	\$69.64	\$74.86	\$79.76	\$84.25
At Default Budget/ FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	48,998	48,430	48,014	47,799	52,493	
Gross State Product	\$5,907	\$6,053	\$6,210	\$6,388	\$5,631	
Gaming Taxes	\$1,535.86	\$1,581.80	\$1,627.30	\$1,672.49	\$712.83	
Sales/Use Tax	\$93.92	\$98.24	\$102.75	\$107.38	\$84.78	
Lottery	(\$3.89)	(\$4.11)	(\$4.23)	(\$4.25)	\$1.27	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$88.30	\$92.35	\$96.01	\$99.43	\$74.86	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 78: Scenario L-1 (minimizing cannibalization), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events – economic impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,824	57,576	54,092	49,257	50,849	50,590
Gross State Product	\$4,646	\$4,128	\$4,014	\$5,368	\$5,698	\$5,882
Gaming Taxes	\$0.14	\$2.27	\$4.30	\$549.62	\$1,228.35	\$1,267.13
Sales/Use Tax	\$43.92	\$85.14	\$83.75	\$81.91	\$82.76	\$88.95
Lottery	\$5.69	\$9.06	\$6.04	\$6.65	\$7.80	\$7.61
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$29.93	\$64.36	\$69.63	\$72.25	\$75.84	\$82.16
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	50,418	50,342	50,289	50,345	49,257	
Gross State Product	\$6,077	\$6,286	\$6,497	\$6,721	\$5,368	
Gaming Taxes	\$1,306.22	\$1,344.82	\$1,382.63	\$1,419.54	\$549.62	
Sales/Use Tax	\$94.05	\$99.44	\$104.93	\$110.44	\$81.91	
Lottery	\$7.38	\$7.27	\$7.22	\$7.23	\$6.65	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$87.25	\$92.31	\$96.86	\$101.13	\$72.25	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 79: Scenario L-1 (minimizing cannibalization), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events – economic impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,826	57,608	54,150	55,637	53,230	51,215
Gross State Product	\$4,647	\$4,130	\$4,019	\$5,887	\$5,871	\$5,884
Gaming Taxes	\$0.26	\$3.94	\$7.46	\$870.76	\$1,761.59	\$1,817.47
Sales/Use Tax	\$43.93	\$85.17	\$83.82	\$87.57	\$91.75	\$94.61
Lottery	\$5.69	\$9.07	\$6.05	(\$3.68)	(\$12.79)	(\$13.45)
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$29.93	\$64.38	\$69.67	\$77.39	\$84.53	\$88.64
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	49,702	48,604	47,775	47,227	55,637	
Gross State Product	\$5,936	\$6,022	\$6,130	\$6,262	\$5,887	
Gaming Taxes	\$1,873.59	\$1,929.27	\$1,984.48	\$2,039.34	\$870.76	
Sales/Use Tax	\$97.69	\$101.24	\$105.03	\$108.98	\$87.57	
Lottery	(\$13.95)	(\$14.29)	(\$14.50)	(\$14.57)	(\$3.68)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$92.18	\$95.60	\$98.67	\$101.45	\$77.39	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 80: Scenario L-1 (minimizing cannibalization), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$1,281	\$1,307	\$1,348	\$1,392	\$1,437
At US Median Rates	\$988	\$1,008	\$1,040	\$1,074	\$1,108
At Pennsylvania Rates	\$1,559	\$1,585	\$1,635	\$1,688	\$1,743
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$1,482	\$1,527	\$1,572	\$1,617	\$1,661
At US Median Rates	\$1,144	\$1,178	\$1,213	\$1,247	\$1,281
At Pennsylvania Rates	\$1,798	\$1,853	\$1,908	\$1,961	\$2,015

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

If each destination resort and the additional 11 pari-mutuel locations outside of Miami-Dade and Broward counties were required to pay other fees that existing pari-mutuel licensees with slots pay (i.e., as-is under current law/current administration), then the opening, and consequent operation, of these 17 facilities would result in additional, annually recurring license fees of \$34 million and \$4.25 million in regulatory fees.

Under this scenario, we believe it is reasonable to expect the creation/addition of six destination resorts in Florida would result in net, direct employment of 22,823 FTEs, while the 11 pari-mutuel locations outside of Miami-Dade and Broward counties would yield net, direct employment of 4,758 FTEs. Under this scenario, we project Florida's 33 casinos would yield net direct employment of 35,419 FTEs.

4. GGR and Related Projections (Maximizing GGR, Pari-Mutuels have Option to End Live Events, Scenario L-2)

In contrast to the objective in the previous scenario (i.e., minimizing cannibalization of GGR to existing casinos), under this scenario, we assume the seven pari-mutuel operators outside of Miami-Dade and Broward counties and within a one-hour drive of an existing Florida casino could have more than 500 slot machines and 15 table games.

Under this scenario, we project six destination resorts could collectively generate \$3.114 billion in GGR annually from 30,000 gaming positions. We project total slot revenue of \$2.367 billion from 22,800 slot machines and total table revenue of \$747.4 million from 1,200 table games. Additionally, we project gross non-gaming revenue of \$1.44 billion stemming from on-site hotel rooms/related, food and beverage, as well as from other non-gaming activities occurring at each location.

Under this scenario, we project slot machines could be economically viable additions at only 11 of the 20 pari-mutuel locations outside of Miami-Dade and Broward counties. We project these 11 pari-mutuel locations could collectively generate \$816 million in GGR annually from 10,738 gaming positions. We project total slot revenue of \$691.6 million from 9,100 slot machines and total table revenue of \$124.5 million from 273 table games. Of the 11 locations, the average location would have 976 gaming positions (827 slots and 25 table games), while the median value in our result set is 944 gaming positions (800 slots and 24 table games). Furthermore, only two locations would have the minimal amount of gaming positions (or 500 slots and 15 table games), while the largest would warrant 1,500 slots and 45 table games (1,770 gaming positions) per our modeling and assumptions utilized.

We project the eight pari-mutuel locations in Miami-Dade and Broward counties would generate \$441.7 million in GGR, with \$374.8 million of gross slot revenue and \$66.9 million of total table games revenue – this would be a 31.9 percent reduction in GGR for these eight casinos from what may otherwise occur (per the Baseline scenario). Therefore, under this scenario, there would be 19 pari-mutuel locations with both slots and table games that could generate \$1.066 billion of gross slot revenue and \$191.4 million of total table games revenue.

From the combination of destination resorts and casinos at pari-mutuel locations we assume taxable GGR would be \$4.03 billion. This level of revenue would result in revenue due to the state as follows:

- \$1.41 billion under the current 35 percent tax rate.
- \$1.088 billion at the US median effective GGR tax rate of 27 percent.
- \$1.781 billion at the effective rate(s) in Pennsylvania.⁸⁶

In addition to aforementioned revenue due to the state, we project \$31.2 million would need to be generated for purse subsidies. Applying a uniform rate applicable to total GGR at all casinos in Florida (net of Native American operations), the rate to generate such purse subsidies would be 0.71 percent under this scenario; however, this rate would be 0.77 percent based on taxable GGR.

We estimate the eight Native American casinos would have \$1.026 billion of combined slot and table games revenue.

In total, we project statewide GGR (from a total of 33 destination resort casinos, pari-mutuel and/or Native American casinos in Florida) would be \$5.4 billion. A summary of this scenario is in the following table:

Figure 81: Scenario L-2 – six destination resorts, slots and tables at pari-mutuels statewide, Seminole casinos have full gambling; maximizing GGR; landscape and projections

Florida Casinos	Six casino resort complexes statewide, with slots/tables at pari-mutuels statewide - maximizing GGR				Compared to Baseline	
	Total Pari-mutuel	Native American	Destination Resorts	Grand Total	\$ Var.	% Var.
# Locations	19	8	6	33	17	106.3%
# Counties	13	6	6	19	13	216.7%
# Slots	17,509	14,564	22,800	54,873	31,900	138.9%
# Table Games	523	431	1,200	2,154	2,154	n/a
# Gaming Positions	20,647	17,150	30,000	67,797	44,824	195.1%
GGR (\$M)	\$1,257.8	\$1,025.6	\$3,114.2	\$5,397.6	\$2,941.9	119.8%
GGR / Position / Day	\$167	\$164	\$284	\$218	(\$75)	-25.5%

Source: Spectrum Gaming Group

We project the statewide casino participation rate (i.e., Florida adults visiting Florida casinos) would be approximately 32.8 percent, while the rate for adults residing within a one-hour drive of a casino location would be 36.2 percent and the rate would be 28.5 percent for those living beyond a one-hour drive of a casino location.

5. Economic/Fiscal Impacts (Maximizing GGR, Pari-Mutuels have Option to End Live Events, Scenario L-2)

Next, we determine the economic impacts of this scenario using the REMI Tax-PI model, using the Default Budget. (See Chapter I[H] for methodology detail.) Scenario L-2 includes three

⁸⁶ See Chapter II(N)(2) beginning on page 147 for detail on the Pennsylvania tax model.

years of construction starting in the first year and does not include Compact revenues. The economic impacts rise sharply in the first years which only reflect construction impacts, then drop after the conclusion of construction before continuing on a steady growth path reflecting the impacts of changes in the gaming sector.

Over the course of the simulation, the average employment is 53,373 and Gross State Product is \$5.7 billion under the Default Budget. Where the employment and Gross State Product differ in the other scenarios is due to the effects of recycling the new state revenues back into the economy. This effect is most clearly seen when comparing the employment trends of the US median gaming tax rate and Pennsylvania gaming tax rates simulations. The US median gaming tax rate simulation starts lower but ends higher due the lower tax rate causing less government spending upfront and lower costs for gaming establishments later. Total state revenues range from an average of \$959.9 million under the US median gaming tax rate to \$1.3 million under the Pennsylvania gaming tax rates.

Figure 82: Scenario L-2 (maximizing GGR), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events – economic impacts using Default Budget/FL Pari-Mutuel Gaming Tax Rate

At Default Budget/ FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,824	58,530	55,048	53,373	51,861	50,686
Gross State Product	\$4,646	\$4,192	\$4,081	\$5,663	\$5,726	\$5,818
Gaming Taxes	\$0.17	\$3.15	\$6.02	\$720.29	\$1,457.61	\$1,504.31
Sales/Use Tax	\$43.92	\$85.62	\$84.79	\$85.95	\$87.79	\$91.43
Lottery	\$5.69	\$8.95	\$5.83	\$1.21	(\$2.94)	(\$3.47)
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$29.93	\$64.73	\$70.47	\$75.89	\$80.93	\$85.54
At Default Budget/ FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	49,836	49,256	48,828	48,605	53,373	
Gross State Product	\$5,938	\$6,083	\$6,241	\$6,419	\$5,663	
Gaming Taxes	\$1,551.13	\$1,597.53	\$1,643.49	\$1,689.13	\$720.29	
Sales/Use Tax	\$95.39	\$99.79	\$104.38	\$109.08	\$85.95	
Lottery	(\$3.83)	(\$4.06)	(\$4.18)	(\$4.20)	\$1.21	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$89.70	\$93.83	\$97.57	\$101.06	\$75.89	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 83: Scenario L-2 (maximizing GGR), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events –impacts using US Median Gaming Tax Rate

At US Median Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,824	58,521	55,029	50,103	51,746	51,485
Gross State Product	\$4,646	\$4,191	\$4,080	\$5,397	\$5,731	\$5,917
Gaming Taxes	\$0.14	\$2.59	\$4.95	\$555.40	\$1,242.54	\$1,281.76
Sales/Use Tax	\$43.92	\$85.61	\$84.77	\$83.04	\$84.04	\$90.38
Lottery	\$5.69	\$8.95	\$5.82	\$6.64	\$7.99	\$7.80
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$29.93	\$64.73	\$70.46	\$73.25	\$76.98	\$83.46
At US Median Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	51,302	51,221	51,162	51,213	50,103	
Gross State Product	\$6,112	\$6,321	\$6,534	\$6,759	\$5,397	
Gaming Taxes	\$1,321.31	\$1,360.35	\$1,398.61	\$1,435.95	\$555.40	
Sales/Use Tax	\$95.58	\$101.08	\$106.66	\$112.25	\$83.04	
Lottery	\$7.56	\$7.44	\$7.40	\$7.40	\$6.64	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$88.67	\$93.84	\$98.48	\$102.83	\$73.25	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 84: Scenario L-2 (maximizing GGR), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events –impacts using Pennsylvania Gaming Tax Rates

At Pennsylvania Gaming Tax Rates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	68,826	58,558	55,098	56,637	54,171	52,108
Gross State Product	\$4,647	\$4,194	\$4,085	\$5,929	\$5,908	\$5,917
Gaming Taxes	\$0.26	\$4.49	\$8.57	\$881.80	\$1,787.77	\$1,844.41
Sales/Use Tax	\$43.93	\$85.65	\$84.85	\$88.86	\$93.24	\$96.15
Lottery	\$5.69	\$8.96	\$5.83	(\$3.94)	(\$13.09)	(\$13.76)
Compact Revenues	\$0.00	\$0.00	\$0.00	(\$54.86)	(\$111.92)	(\$111.72)
All other Revenues	\$29.93	\$64.74	\$70.51	\$78.52	\$85.87	\$90.09
At Pennsylvania Gaming Tax Rates	Year 7	Year 8	Year 9	Year 10	Average	
Employment	50,559	49,426	48,574	46,468	56,637	
Gross State Product	\$5,966	\$6,051	\$6,156	\$6,135	\$5,929	
Gaming Taxes	\$1,901.12	\$1,957.45	\$2,013.25	\$2,068.22	\$881.80	
Sales/Use Tax	\$99.29	\$102.89	\$106.73	\$109.00	\$88.86	
Lottery	(\$14.27)	(\$14.61)	(\$14.82)	(\$12.25)	(\$3.94)	
Compact Revenues	(\$113.92)	(\$116.22)	(\$118.57)	(\$120.97)	(\$54.86)	
All other Revenues	\$93.70	\$97.20	\$100.32	\$101.76	\$78.52	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Figure 85: Scenario L-2 (maximizing GGR), slots and table games at pari-mutuels statewide and six destination resorts statewide and Seminole casinos have full range of games but without Compact revenue-sharing and reduction in pari-mutuel events – static tax revenue estimates

Static Tax Estimate	Year 1	Year 2	Year 3	Year 4	Year 5
At Pari-Mutuel Rates	\$1,293	\$1,320	\$1,361	\$1,405	\$1,451
At US Median Rates	\$998	\$1,018	\$1,050	\$1,084	\$1,119
At Pennsylvania Rates	\$1,577	\$1,604	\$1,655	\$1,709	\$1,764
Static Tax Estimate	Year 6	Year 7	Year 8	Year 9	Year 10
At Pari-Mutuel Rates	\$1,497	\$1,543	\$1,588	\$1,633	\$1,677
At US Median Rates	\$1,155	\$1,190	\$1,225	\$1,259	\$1,294
At Pennsylvania Rates	\$1,820	\$1,876	\$1,931	\$1,985	\$2,039

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

If each destination resort and the additional 11 pari-mutuel locations outside of Miami-Dade and Broward counties were required to pay other fees that existing pari-mutuel licensees with slots pay (i.e., as-is under current law/current administration), then the opening, and consequent operation, of these 17 facilities would result in additional, annually recurring license fees of \$34 million and \$4.25 million in regulatory fees.

Under this scenario, we believe it is reasonable to expect the creation/addition of six destination resorts in Florida would result in net, direct employment of 22,605 FTEs, while the 11 pari-mutuel locations outside of Miami-Dade and Broward counties would yield net, direct employment of 5,623 FTEs. Under this scenario, we project Florida’s 33 casinos would yield net direct employment of 35,901 FTEs.

Social Costs of Combining Expansion Scenarios

As discussed above, obviously the different scenarios for gambling expansion could have very different fiscal effects on the State of Florida. What about the social costs associated with pathological gambling? Will these be expected to change dramatically, depending on the specific scenario of gambling expansion?

In Chapter IV, we discuss the prevalence of problem and pathological gambling. We also posited a variety of social cost estimates based on the 2012 Census Bureau’s population estimate and a social cost figure based on an economics definition of social cost. Here we wish to reiterate some of the conceptual problems with deriving social cost estimate, then we will examine the likely changes in social costs depending on the different gambling expansion scenarios.

“Social costs” generally refer to negative social impacts that are caused by problem – or pathological gamblers. Examples of such measurable social costs include legal costs and therapy costs. But there also may be significant immeasurable social costs, such as the anguish the pathological gamblers cause themselves and their families. Because of difficulties in defining and measuring the social costs of gambling, as discussed in detail in the previous section, any

social cost estimate – including that posited in this report – should be viewed with skepticism. This is because this area of research is simply not well-developed, and many of the methodological problems are insurmountable. Nevertheless, for REMI’s analysis in this report, we used a social cost of gambling estimate of \$373.4 million per year for the state of Florida. This figure was based on lifetime prevalence estimates from the literature of 0.5 percent for problem gambling and 0.5 percent for pathological gambling. We used an economics definition of social cost, which specifies that reductions in societal wealth should be measured, but that transfers of wealth and costs borne by the gamblers themselves should not be included in a social cost estimate.

The key question for understanding how social costs are likely to change with different scenarios of gambling expansion in Florida is: Does pathological gambling prevalence change as the availability of gambling changes? If the answer is “yes,” then we may see the social costs in Florida increase with the introduction of new forms of gambling. However, if prevalence tends to remain fairly constant, then we would not expect social costs to vary much – whatever gambling expansion scenario is considered.

Obviously, Florida currently has a variety of opportunities for legal gambling, including pari-mutuels, Indian casinos and the lottery. Yet, if commercial casinos were to open or if slot machines were introduced at racetracks around the state, one would expect that these new gambling opportunities would attract new customers to those businesses. Hence, we should expect that the amount of gambling by state residents will increase. In addition, then, we might also expect there to be an increase in the amount of problem and pathological gambling. The literature is informative on this issue.

As we discussed in Chapter IV, there have been several different studies on the relationship between casino proximity and pathological gambling. Some of the papers were reviewed in a recently published study.⁸⁷ The review by Tong and Chim suggests that the evidence is mixed. However, most of the evidence reviewed in this paper seems to suggest that there might be a short-term increase in problem/pathological gambling after the introduction of a new gambling opportunity (say, the opening of a new casino). However, studies that looked beyond one year did not show an increase in problem gambling compared to the time before the new gambling venue opened.⁸⁸

This evidence is consistent with the “social adaptation model” of new or expanded gambling, as discussed in the paper by Shaffer et al.⁸⁹ As discussed in the previous section of this

⁸⁷ Henry H.Y. Tong and David Chim, “The Relationship Between Casino Proximity and Problem Gambling,” *Asian Journal of Gambling Issues and Public Health*, Volume 3, 2013. Available at <http://ajgiph.com/content/3/1/2>.

⁸⁸ *Ibid.*, p. 16.

⁸⁹ Howard J. Shaffer, Richard A. LaBrie and Debi LaPlante, “Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Considering the Case of Legalized Gambling as a Public Health Toxin,” *Psychology of Addictive Behaviors*, Volume 18, 2004, p. 40-48.

report, the social adaptation model suggests that the novelty of a new gambling venue or of new types of gambling available at an existing venue may initially generate new interest on the part of gamblers. This leads to increased gambling and problem gambling. Yet, after the novelty effect wears off, the levels of gambling and problem gambling fall back in line with their more stable, long-term values.⁹⁰

This suggests that the different scenarios for gambling expansion in Florida being considered in this section are not likely to have a significant long-term impact on the social costs of gambling in Florida. Yes, there may be a short-term increase in these values, but it is difficult, if not impossible, to provide a specific estimate of how much social costs are likely to rise in the short term. Hopefully, policymakers and voters are more concerned with the likely longer-term impacts of expanded gambling and will, therefore, be more interested in the long-term impacts and not focus too much on the short-term (next-year) impacts. Because of this, we assume that the social costs of gambling would remain fairly stable, at least in the long run however gambling might be expanded in Florida.

The economic impact simulation focuses on capturing the economic impact of the social costs of expanded gaming. These costs were modeled by reducing the amenity value of Florida. (The amenity value is a measure of attractiveness to economic migrants. The amenity value of a region falls due to, say, worsening safety, noise, traffic, etc. This causes fewer people to want to live there, leading to a whole ripple effect of economic impacts.) This methodology is used to capture non-pecuniary aspects that can generally be described as quality of life. Over the course of the simulation, the average employment is -474 jobs and Gross State Product is -\$46 million. Total state revenues average -\$10.2 million.

⁹⁰ Howard J. Shaffer, Richard A. LaBrie and Debi LaPlante, "Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Considering the Case of Legalized Gambling as a Public Health Toxin," *Psychology of Addictive Behaviors*, Volume 18, 2004, p. 42.

Figure 86: Economic impacts of the social costs of gambling on the State of Florida

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	-195	-265	-361	-474	-597	-719
Gross State Product	(\$20)	(\$27)	(\$36)	(\$46)	(\$57)	(\$70)
Gaming Taxes	(\$0.00)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)
Sales/Use Tax	(\$1.37)	(\$1.78)	(\$2.21)	(\$2.68)	(\$3.19)	(\$3.72)
Lottery	\$0.37	\$0.49	\$0.58	\$0.65	\$0.70	\$0.73
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	(\$3.58)	(\$4.59)	(\$5.47)	(\$6.33)	(\$7.07)	(\$7.80)
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	-837	-955	-1,065	-1,186	-474	
Gross State Product	(\$82)	(\$96)	(\$110)	(\$126)	(\$46)	
Gaming Taxes	(\$0.02)	(\$0.02)	(\$0.02)	(\$0.02)	(\$0.01)	
Sales/Use Tax	(\$4.28)	(\$4.88)	(\$5.51)	(\$6.20)	(\$2.68)	
Lottery	\$0.76	\$0.78	\$0.79	\$0.79	\$0.65	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	(\$8.50)	(\$9.23)	(\$9.91)	(\$10.58)	(\$6.33)	

Source: Spectrum Gaming Group, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Evaluating Three Alternative Gaming-Tax Regimes

Our fiscal analyses evaluate each of three alternative tax regimes, with respect to casino GGR projections (that is revenue derived from slots and/or table games, and excludes poker and cardroom operations), as directed by the Florida Legislature:

- One in which all non-lottery gaming activities are taxed at rates corresponding to current pari-mutuel tax rates;
- One in which all non-lottery gaming activities are taxed at national average rates for their respective subsectors; and
- One in which non-lottery gaming activities are taxed at a rate that would maximize state revenues.

Note that Spectrum provided the projected tax receipts under each of the three tax regimes for each of the relevant scenarios above.

For the first bullet point above, we assume that all GGR resulting from our modeling will be taxed at the current effective GGR tax rate of 35 percent on slots at pari-mutuels. Since this is applicable to net slot revenue (i.e., net of promotional credits and unclaimed tickets), we further assume net slot revenue is 90 percent of total slot revenue and assume all applicable table games revenue is fully taxable or subject to revenue sharing (related to revenue sharing at Native

American casinos and taxation at destination resorts, we assume 25 percent of total GGR is, or will be, table-games related).

For the second bullet point above, we examine most recent and/or current annual, effective gaming tax rates from all states having commercial casino operations. This is based on tax data presented in the American Gaming Association (“AGA”) 2013 edition of *State of the States: The AGA Survey of Casino Entertainment*) and GGR results prepared by respective state agencies (and published by Spectrumetrix). Succinctly, calculate the effective tax rate for each state with a commercial casino (of the 23 states reported) as the respective percentage of reported gaming tax revenue (per AGA) as a percentage of reported GGR by state. The following table displays these results for 2012 (sorted in alphabetical order by state).

Figure 87: Effective GGR tax rates by state, for commercial casino operations (2012, in alpha order)

State	# Casinos	GGR	Tax	Effective Rate	Rank
Colorado	41	\$766.3	\$104.3	13.6%	20
Delaware	3	\$520.6	\$217.4	41.8%	5
Florida	6	\$489.2	\$161.8	33.1%	9
Illinois	10	\$1,638.2	\$574.3	35.1%	8
Indiana	13	\$2,685.5	\$806.6	30.0%	11
Iowa	18	\$1,466.8	\$334.4	22.8%	16
Kansas	3	\$341.1	\$92.2	27.0%	12
Louisiana	18	\$2,405.2	\$579.5	24.1%	15
Maine	2	\$99.3	\$43.1	43.4%	3
Maryland	3	\$377.8	\$218.2	57.8%	2
Michigan	3	\$1,416.7	\$319.8	22.6%	17
Mississippi	30	\$2,231.6	\$272.7	12.2%	21
Missouri	13	\$1,767.9	\$471.4	26.7%	13
Nevada	265	\$10,861.1	\$868.6	8.0%	23
New Jersey	12	\$3,056.1	\$254.8	8.3%	22
New Mexico	5	\$241.5	\$62.8	26.0%	14
New York	9	\$1,941.1	\$822.7	42.4%	4
Ohio	4	\$459.8	\$138.2	30.1%	10
Oklahoma	2	\$113.1	\$20.4	18.0%	18
Pennsylvania	11	\$3,807.4	\$1,487.0	39.1%	6
Rhode Island	2	\$528.0	\$329.0	62.3%	1
South Dakota	35	\$107.4	\$16.6	15.5%	19
West Virginia	5	\$1,035.5	\$402.5	38.9%	7
Total (Avg. Eff. Rate)	513	\$38,357.1	\$8,598.2	22.4%	
Median				27.0%	

Source: American Gaming Association, respective state reporting agencies. \$ in millions.

Figure 88: Effective GGR tax rates by state, for commercial casino operations (2012, ordered by rank)

State	# Casinos	GGR	Tax	Effective Rate	Rank
Rhode Island	2	\$528.0	\$329.0	62.3%	1
Maryland	3	\$377.8	\$218.2	57.8%	2
Maine	2	\$99.3	\$43.1	43.4%	3
New York	9	\$1,941.1	\$822.7	42.4%	4
Delaware	3	\$520.6	\$217.4	41.8%	5
Pennsylvania	11	\$3,807.4	\$1,487.0	39.1%	6
West Virginia	5	\$1,035.5	\$402.5	38.9%	7
Illinois	10	\$1,638.2	\$574.3	35.1%	8
Florida	6	\$489.2	\$161.8	33.1%	9
Ohio	4	\$459.8	\$138.2	30.1%	10
Indiana	13	\$2,685.5	\$806.6	30.0%	11
Kansas	3	\$341.1	\$92.2	27.0%	12
Missouri	13	\$1,767.9	\$471.4	26.7%	13
New Mexico	5	\$241.5	\$62.8	26.0%	14
Louisiana	18	\$2,405.2	\$579.5	24.1%	15
Iowa	18	\$1,466.8	\$334.4	22.8%	16
Michigan	3	\$1,416.7	\$319.8	22.6%	17
Oklahoma	2	\$113.1	\$20.4	18.0%	18
South Dakota	35	\$107.4	\$16.6	15.5%	19
Colorado	41	\$766.3	\$104.3	13.6%	20
Mississippi	30	\$2,231.6	\$272.7	12.2%	21
New Jersey	12	\$3,056.1	\$254.8	8.3%	22
Nevada	265	\$10,861.1	\$868.6	8.0%	23
Total (Avg. Eff. Rate)	513	\$38,357.1	\$8,598.2	22.4%	
Median			272.7	27.0%	

Source: American Gaming Association, respective state reporting agencies. \$ in millions.

As illustrated, in 2012, the average effective GGR tax rate in the US (for the 23 states with commercial casinos and reporting such information) was 22.4 percent. However, the median effective GGR tax rate was 27 percent (i.e., 11 of the 23 states had higher rates, while 11 of the 23 states had lower rates; Kansas had the median value).

As such, for the second bullet point, we assume that all GGR resulting from our modeling will be taxed at the median effective GGR tax rate of 27 percent. We further assume this effective rate is applicable to net slot revenue (i.e., net of promotional credits and unclaimed tickets – assumed at 10 percent of slot revenue) and assume that all table games revenue is taxable at applicable rates.

The third bullet point, which seeks to identify a tax rate that would maximize state revenues, requires its own detailed analysis:

1. Tax policy

This section focuses on a critical theme that will resonate throughout this report: the role of tax policy in gaming. Setting the tax rate, and its attendant provisions, is a core input that meaningfully impacts various areas, including:

- Overall GGR levels

- Non-gaming revenue
- Employment
- Capital investment
- Ability of casinos to compete in-state and out-of-state
- Participation rates by adults
- Frequency of visitation

Yet, despite its central role, tax policy is rarely considered by lawmakers – in Florida or elsewhere – as a key driver of policy decisions. Notably, in Florida, the state’s tax policy on racinos was initially criticized as being developed to thwart success. In our experience, it is not unusual for lawmakers to adopt a variety of policies that, intentionally or not, limit the growth of casinos and inhibit investment. Such policies range from requiring casinos to “float” on waterways, regardless of their navigability or whether they float in rivers or in artificial moats, to loss limits or admission fees.

Historically, tax policy has been largely driven by political considerations, with pro-gaming lawmakers establishing rates designed to secure the votes of fellow lawmakers. That pattern can be traced back to 1976, when New Jersey set the tax rate on the future casino industry in Atlantic City at 8 percent, a rate that was established to be higher than the rate in Nevada, which at the time was the only state with legal casinos.

Exceptions have arisen in recent years, most notably in Massachusetts, where the minimum tax rate is 25 percent, in line with that state’s goal of developing destination resorts. Still, the long-term trend has been – and remains – to view tax policy through a political prism. That, in our experience, represents a lost opportunity.

Tax policy can be a powerful tool to shape and advance public policy but must be understood within the proper context.

a. Optimization

There is no one tax rate that would be considered optimal for the gaming industry as a whole, or even within a state or region. Tax policy should be viewed in its broadest context: The optimal rate for any state, or particularly for any facility, is the rate that generates the greatest level of well-planned capital investment. Such investments, in turn, generate additional employment and visitation. These factors further fuel revenue generation in different areas, such as sales taxes. If planned well, tax policy that is designed to encourage capital investment can also advance policies, such as tourism promotion that would further advance other policies and economic interests.

Spectrum summarized this observation in a 2008 peer-reviewed white paper that we produced for the National Tax Association:⁹¹

Operators that are considering initial or subsequent capital investments in gaming properties will examine a variety of factors, but will likely examine a range of potential scenarios through the prism of an economic model.

Operators would potentially use such a model to determine feasibility if the NPV – the present value of future cash flows, discounted by an appropriate rate – is positive, or if the IRR (the expected return when the NPV is zero) exceeds the weighted average cost of capital (“WACC”), which we are using as an appropriate rate. Some operators may calculate this “hurdle rate” (or discount rate⁹²) as a minimum required rate that they impose on potential projects, rather than a WACC, but the results would be the same.

The WACC would, regardless of market conditions, be affected by the ratio of debt to equity financing, and would be affected by the level of risk. Because equity investors assume a greater level of risk (bondholders are ahead of stockholders, for example, in the event of liquidation, among other factors), equity should be considered a more expensive form of financing.

So, the WACC would increase if a project relies more on equity financing, and would increase if risk increases (translating into a required increase in return to compensate investors for that enhanced risk).

It should be no surprise that the tax rate – which is based on top-line gaming revenue and must be paid regardless of whether a property is profitable or not – is a critical factor in determining the viability of projects or the potential return on investment in such projects.

Many factors could impact the potential IRR of a project, from the potential Earnings Before Interest, Taxes, Depreciation and Amortization (“EBITDA”) to the projected construction cost and the cost of capital, but tax rates – while they are often determined by a purely political calculus – play a material, meaningful role in decisions by managers as to how best to deploy available capital.

Just as important, tax rates are a key determinant in establishing what type of business model a casino operator will adopt.

The employment factor – and the taxes and increased economic activity generated by employees – should be paramount when policymakers are considering tax rates. By definition, a well-capitalized property with multiple amenities will employ more people than a smaller, convenience-based property with fewer amenities.

On a surface level, it might appear that the optimal tax rate would be the lowest, since a lower tax rate would increase an operator/developer’s return on investment, which would justify

⁹¹ Spectrum’s peer-reviewed white paper, “Casino Tax Policy: Identifying the Issues that Will Determine the Optimal Rate,” was released at the National Tax Association 103rd Annual Conference on Taxation, held in Chicago in 2010. Thomas A. Garrett, assistant vice president of the Federal Reserve Bank of St. Louis, reviewed the report and led a discussion on its findings.

⁹² Discount rate equates to the rate of return required to take on the risk of operating the business.

a greater capital investment. However, that is an overly simplistic analysis. Other factors can limit either the ability or the willingness of an operator to invest capital in a project. Such factors can include:

- An operator's existing leverage ratios, as well as its cost of capital.
- The present and future market conditions, including the competitive landscape, as well as the number of adults within relatively easy access of a location.

On the other hand, the assumption might be that the highest level that can be imposed on an operator, without forcing that operator out of business, might be ideal. In our experience, that does not translate into the optimal rate if lawmakers are considering the benefits from multiple revenue streams, including sales taxes. The highest rate would limit the operator to a business model that relies on minimal capital investment while largely targeting only the nearby, drive-in market.

So, while the highest tax rate available might not be ideal, neither should policymakers assume that simply lowering the rate will attract the necessary capital investment. A critical factor that Florida policymakers may consider when evaluating the tax structure is the notion that operators may simply elect to take advantage of a competitive, attractive tax rate by investing elsewhere. Even though a high tax rate may discourage investment in a particular project that does not mean that a lower tax rate will encourage investment.

Operators – particularly those with the willingness and wherewithal to invest in multiple properties across jurisdictional lines – will weigh such options against each other, with the likelihood that the options that offer the highest IRR will secure the investment dollars.

That possibility, however, does not mean that policymakers should not endeavor to seek an optimal tax rate, however elusive that may be. Rather, it suggests that current and potential operators need to justify lower tax rates, to view them in the context of a quid pro quo.

A system in which only operators that can justify lower tax rates by promising certain levels of investment and employment would certainly increase the likelihood of realizing such levels of investment and employment. Essentially, that is one of the core principles behind the Massachusetts gaming statute. The gaming tax rate was set at a floor of 25 percent, but bidders for licenses have the option of offering higher tax rates, or license fees in excess of the minimum \$80 million.

Under such a system, regulators would weigh competing bids on a variety of factors, including which bidders are more likely to generate the greatest overall economic benefit. Policymakers cannot assume, in such competitive bidding situations, that all applicants will seek the lowest tax rate. Indeed, it is possible – some might argue that it is likely – that some bidders will suggest a higher tax rate, believing that a higher tax rate will prove more attractive to the decision-makers.

That could mean, in a state such as Massachusetts, that different operators will be operating in different regions under different tax rates. Such a scenario – whether in Massachusetts, Florida or elsewhere – raises more issues that must be considered, including tax parity.

When states endeavor to find an optimal rate by lowering existing rates (as occurred in Florida), it is usually greeted favorably by operators and investors. When rate increases are imposed, or even considered, the opposite effect occurs, sometimes in dramatic fashion.

For example, Spectrum noted the aftershocks that occurred when a potential tax increase was considered in New Jersey 10 years ago. The administration of then-Governor of New Jersey Jim McGreevey publicly suggested that it hoped to raise revenue by adjusting the tax on casino GGR in Atlantic City. The news media reported on February 4, 2003 that New Jersey was considering a 2 percent increase in casino revenue taxes.⁹³ By the end of the next day, the stock market value of Atlantic City casino operators had declined by \$790 million.⁹⁴ The state was simultaneously considering the possibility of allowing casinos in Northern New Jersey.⁹⁵ These issues led a gaming analyst at the time to link the related market uncertainty to delays in a \$475 million bond sale Trump Entertainment Resorts was considering and to wonder if it would proceed.⁹⁶

In our experience, if New Jersey had set the tax rate at 10 percent, rather than 8 percent, in the original legislation, it would likely have had no impact on the level of capital investment and the ensuing growth (and subsequent decline) in Atlantic City revenue. The issue here was not the rate, but the projected increase, which added risk to the investment consideration. That risk translated into a nearly \$800 million decline in the equity value of affected operators, which translates into a concomitant increase in the cost of capital.

b. Tax Parity

As has been noted extensively in Florida, tax parity is a concern, particularly among pari-mutuel operators. Proponents of parity as a policy suggest that an unlevel playing field – in which low-tax operators have more freedom to invest, as well as more freedom to grow market share by increasing promotional spending – is inherently unfair, and is thus bad policy. Such an argument clearly has some merit.

⁹³ Laura Manserus, “McGreevey Offers a Budget With No New Taxes but Much Austerity,” *New York Times*, February 4, 2003.

⁹⁴ Spectrum Gaming Group, “Examining impacts on Atlantic City of proposed tax increases, VLT competition,” April 2003.

⁹⁵ Trump Entertainment Resorts Funding, Inc., Form 10-K (filed March 31, 2003), pp. 7-8, <http://www.sec.gov/Archives/edgar/data/943322/000095013003002754/d10k.htm>.

⁹⁶ Joe Weinert, “\$475m. Question Still Lingers: Can Trump Refinance? / Bonds Are Becoming An Even Tougher Sell,” *Press of Atlantic City*, February 26, 2003, p. B6.

However, another argument for maintaining parity may be equally meritorious but gets little attention: the notion that disparate tax rates can create conflicting state policies. Such conflicts are more readily apparent in states that house both commercial and Indian casinos, although this issue is not limited to such states. In our experience, the policy conflicts are readily apparent in a state such as Iowa, where commercial casinos are taxed but Indian casinos are not.⁹⁷ This sets up a situation in which the state has a clear, abiding interest in shifting revenue from tribal to commercial casinos.

Due to revenue-sharing, as part of the Compact negotiated with Seminole Tribe, the contrast is less apparent and, consequently, less acute in Florida. But it exists nonetheless. Within the existing gaming landscape in Florida, when consumers make a choice between playing slots at a racino in Broward County or at the Seminole Hard Rock, the state may gain or lose, depending on the choice. As racinos are taxed at a higher rate (35 percent) than the agreed revenue-share percentage at the Hard Rock, the state gains a larger share of that player's losses and, as a result, lawmakers might be more inclined to pursue policies that favor the racinos. This perceived differential in revenue could be offset by the argument that, in this example, the Hard Rock has a larger employment base and is more likely to bring in gamblers from outside Florida. Such suggestions are more difficult to quantify, however, and might not be as effective with other examples, such as, say, contrasting the Miccosukee properties with racinos.

Various states have elected to set differing tax rates on slots and tables, typically about 35 percent on slots and 14 percent on tables. In Connecticut, the compacts negotiated between the state and the two tribal operators set revenue-sharing at 25 percent on slots, and 0 percent on tables. The view, correct in our judgment, is that tables are more labor intensive and thus have lower margins, which would justify a lower rate. However, we point out that the concept of different rates on tables and slots is relatively new and is largely a product of ever-rising rates, which have already reached the point in existing and previous slots-only markets of being unworkable as an effective rate on tables.

As Florida contemplates an expansion of gambling through the authorization of additional destination casino resorts, the tax implications regarding rates on GGR are complex. For example, here is a potential policy conundrum that could accompany such a debate:

- If rates on destinations are set lower than racino rates, should racinos be granted parity with the lower rates?
- If not, will that give destination resorts an unfair competitive advantage?
- If not, will it potentially create a situation in which any cannibalization of racino revenue by destination resorts result in an opportunity cost for the state (which

⁹⁷ As entities owned by sovereign Indian nations or tribes, Indian casinos are not subject to state tax. Many Class III Indian casinos participate in a revenue-sharing agreement with their host state (i.e., through a compact), which from a competitive standpoint equates to a tax on GGR. Class II Indian casinos typically do not participate in revenue-sharing with their host state.

would have lost the opportunity to realize a greater percentage by having that money taxed at the racino rate)?

- If so, would this simply allow the racinos to be competitive, or could it potentially result in a relative windfall to racinos that are able to maintain something close to their present revenue levels?
- If so, would racinos potentially use the extra funds that result from a lower tax rate to make investments outside Florida? In other words, would Florida simply be cutting the rate for the benefit of other states and/or outside investors?

This is not the first time that Florida has confronted such a situation, as such a debate would to some degree be a replay of the discussion that took place after reducing the racino tax rate from 50 percent to 35 percent in 2010, following the successful negotiation of a Compact with the Seminole Tribe.

The issues are not precisely parallel, however. The previous tax rate of 50 percent on racino revenue was arguably onerous to the point of being potentially confiscatory, particularly when such taxes are coupled with the effective-tax contributions imposed on racinos through the agreements they negotiate with their respective pari-mutuel stakeholders.

A 35 percent tax rate is significantly less onerous, but as a number of racino operators have pointed out to us, the combined taxes and pari-mutuel obligations make it difficult to realize an acceptable return on investment, particularly one that would justify additional capital investment.

One possible means of addressing the issue of parity at a lower rate would be to have any destination casino operators pledge to make up any shortfall realized by lowering the rate on racino operators, a concept that was floated during the recent debates on authorizing new destinations.

That may not entirely address the issue, however. It would not encourage more capital investment and could actually discourage such investment. Consider a situation in which one or more racino operator shifts resources to other investments outside Florida, which would be more achievable with a lower tax rate. If destination casino operators make up that tax shortfall, it would add to their own economic burden, creating a new expense that would impact their own bottom lines and any potential returns on future investment. Thus, if one side of the equation makes investments outside Florida while the other makes fewer investments, the state is not made whole – even if its tax revenues do not decline year over year.

Notably, the issue of tax parity between commercial and tribal operators may never be resolved, as it is largely unresolvable by design. Both the Indian Gaming Regulatory Act and federal case law make it clear that states lack either the authority or ability to tax tribal gaming operations. Compacts such as that negotiated in Florida, as well as elsewhere in the country, allow for revenue sharing in exchange for something of value from the state, such as exclusivity.

Absent such agreements, tribes that meet federal requirements can provide the same offerings as others in the state without any need to share revenue. Thus, if tribes and commercial operators compete with the same offerings, there can never be tax (i.e., cost) parity, unless the commercial operators are freed from any tax obligations, which is not likely to occur in any gaming state.

The other issue with respect to tax parity is the concern expressed by pari-mutuel operators with regard to any potential decoupling of gaming from pari-mutuel: Such an action would appear to give some pari-mutuel operators – those that do not have the added burden of funding pari-mutuel operations – a distinct advantage. That tax advantage can translate into more competitive facilities, as well as greater ability to increase promotional spending to gain market share.

As we noted in our first report to the Florida Legislature, the status quo in racinos is hardly ideal and has led to business decisions that likely would not have been made in the absence of the present tax structure. We reported on pages 38-39:

In addition to the prospects of cardroom and casino revenue, a jai alai license can be transferred or leased to another operator. The courts are currently reviewing whether a jai alai permit can be converted into a greyhound or racing permit. The bottom line is that jai alai permits are being issued and sought due to reasons that have nothing to do with the profitability of jai alai. Indeed, the jai alai sector as a whole sustained an operating loss of \$14 million in FY 2012.⁹⁸

So why do the subsidies for jai alai endure? The elimination or reduction of jai alai subsidies would give casinos tied to frontons an unfair advantage over casinos tied to other forms of pari-mutuel wagering. The same arguments could be made for dog racing as well. If dog racing and jai alai were allowed to “decouple” their pari-mutuel operations from their gaming operations, this would effectively lower their overall obligations, the effective tax rate they now pay. By having a lower effective tax rate, this would eliminate parity with the pari-mutuels that are not decoupled, and any potential for eliminating parity can be expected to generate opposition. So, the subsidies endure because their presence helps ensure that all pari-mutuels pay a similar effective tax rate.

As a result, the current stalemate is perpetuated, and policymakers are not encouraged by the industry to address issues that could arguably advance public policies, such as the possibility of shifting some revenue-sharing that now goes to various forms of pari-mutuel wagering to general revenues.

c. Identifying Options

The Florida Legislature has several options with regard to tax policy, including:

⁹⁸ Spectrum review of annual audited financial statements submitted by jai alai operators to PMW.

- **Status Quo:** This option would perpetuate the current situation in which lawmakers would continue with the present tax structure, recognizing that tax rates – and revenue-sharing arrangements with tribes – were not necessarily established based on economic considerations as to what would generate the most capital investment as well as the highest level of tax revenue. Aspects that are viewed as fair, and those that are viewed as unfair and counter-productive, would remain in place.
- **Lower tax rate for future casino destination resorts:** This option would meet the need for future operators to have a competitive rate that would justify significant capital investments in new properties, but would make racino operators less competitive, threatening the existence of some and reducing the likelihood that such operators would invest further in their properties.
- **Create parity by lowering tax rate and/or decoupling for existing racinos:** This option could be a significant boon to racino operators, as it would instantly boost their bottom lines and potentially justify more investment in existing gaming properties. It also would not violate the terms of the Seminole Compact, thus minimizing the risk of altering that revenue stream. Any move toward decoupling would add economic efficiency as well, by removing any pari-mutuel operation that cannot operate as a going concern through its own business model. This likely would be a death knell for jai alai and greyhound racing but would also have a severe impact on many horse-racing operators and their support system. This option also could create a scenario in which one or more racino operator elects to invest its increased cash flow into opportunities outside Florida.
- **Require existing and future operators to justify a competitive tax rate:** As no one optimal tax rate can fit all scenarios, or cover all gaming properties, a policy that allows existing or potential operators to put forth why a particular tax rate is optimal offers some significant benefits. For example, in a competitive bidding situation – as described in Massachusetts, and as might govern a competitive process for casino resort destination licenses in Florida – bidders can provide details as to how much they intend to invest, how they will deploy that capital, and how they identify the optimal rate for their property. In such instances, the analysis would cover the economic impact and accompanying tax revenue from a variety of sources. As envisioned in a competitive bidding situation, operators would be required to make the necessary promised investment.

Notably, that latter scenario would not necessarily limit that concept to competitive bids, but could be applied to existing operators. As discussed, such a policy should preclude the possibility of an operator merely taking advantage of a lower rate by investing elsewhere.

Legislation that was debated several years ago in New York, which we analyzed at the time for studies we were producing, offers some level of guidance. A bill was introduced in 2008 that would allow a 750-room casino resort in the Catskills, with a convention center and a 100,000-square-foot casino, to be built at a 25 percent tax rate, which was less than half the rate governing the state's slots-only racinos. The initial bill had the following conditions before a developer could secure the lower rate:⁹⁹

- At least \$1 billion in capital must be invested in the facility.
- At least 2,000 permanent jobs must be created.
- At least one 18-hole golf course and a convention center, among other amenities, must be built.
- The contribution to state education from the tax would increase from its then-current levels, estimated at about \$19 million.

The tax was structured so that the operator would pay the lesser of 25 percent or \$38 million, which was twice the amount then going to education. That \$38 million would stay the same for eight years, and then could be increased under certain terms, such as the lesser of either 2 percent or the rise in the Consumer Price Index.

A year later, following the advent of the recession, the bill – which was signed into law but never implemented – was reintroduced, and was less ambitious:¹⁰⁰

- The amount of capital to be invested declined from a minimum of \$1 billion to \$600 million.
- The minimum number of permanent employees declined from 2,000 to 1,000.
- The requirement to build a convention center was eliminated.

The new law also reflects changes to the potential increase in taxes if certain thresholds are met. For example, the previous law required that, if the employment numbers fell short by more than 50 percent from the 2,000-employee goal, the state would recapture two-thirds of the tax revenue that it would have given up as an incentive. The new bill stated that, if the employment numbers are less than two-thirds of the 1,000-employee goal, 100 percent of the foregone tax revenue would be recaptured. The revised bill had a sliding scale on that measure, down to an 11 percent recapture rate if the employment shortfall is more than 10 percent of the goal.

The New York effort – even in its less ambitious form – demonstrated the clear recognition that lower tax rates hold out the promise of being an effective incentive if:

⁹⁹ Tom Wanamaker, "Legislation boosts plan for casino in Catskills," *Watertown Daily Times*, June 27, 2008. <http://www.watertowndailytimes.com/article/20080627/NEWS01/556727382> and <http://open.nysenate.gov/openleg/api/html/bill/A8767A>.

¹⁰⁰ <http://open.nysenate.gov/openleg/api/html/bill/A8767A> (accessed October 5, 2009) and telephone interview with New York Gaming Association (July 25, 2013).

- The operator commits to investing significant sums in the size, quality and number of amenities.
- The operator reaches certain goals, in areas ranging from employment to revenue generation.

Effectively, such efforts can achieve ambitious goals but must be viewed in the proper context: Both the operator and the state must share common objectives and must work in tandem. The core attribute of such legislation is that the operator is not merely entitled to a lower, more attractive tax rate – that rate must be earned through the development and achievement of ambitious goals.

d. Conclusion: Uniform Optimization in Tax Rates Remains Elusive

When endeavoring to identify the ideal tax rate, lawmakers must recognize that no one rate can work in all instances as being optimal. There are simply too many factors and moving parts that would allow Florida legislators to pinpoint one rate that fits everyone, and such factors would include but not be limited to:

- Location
- Access
- Business model
- Type of offering that is allowed (slots, tables and limits on type of table games)
- Operator's cost of capital

But while the ideal rate itself may be a changing target, the goal is fixed and immutable: What is the rate that will generate the most capital investment, and the attendant level of employment, tourism promotion and other goals?

We also re-emphasize that a property operating under an ideal rate – even if that rate is lower than what might otherwise be allowed – can, if structured and managed properly, generate greater levels of revenue than might otherwise be expected.

2. Applying the Pennsylvania Model

While the previous section made clear that no one optimal rate can be identified that would maximize revenue for Florida in all instances among all operators, we can still look to other states for examples as to how they endeavored to maximize revenue. One example is Pennsylvania.

There are 11 casinos in Pennsylvania, with the first opening in November 2006. These 11 casinos are located throughout seven metropolitan statistical areas in the state. However, the two most populous metropolitan areas (Philadelphia and Pittsburgh) have multiple casinos and are home to six of Pennsylvania's 11 casinos.

In 2012, Pennsylvania casinos generated \$3.8 billion in GGR, ranking second behind only Nevada among the 23 state-regulated jurisdictions.¹⁰¹ However, Pennsylvania easily ranked first in GGR tax revenue collected, at \$1.49 billion (vs. \$869 million for Nevada). Additionally, Pennsylvania's GGR tax collection figure was four times the average of \$374 million per state and more than five times the median value of \$273 million.

The effective GGR tax rate in Pennsylvania was 39.1 percent in 2012 (which ranked sixth of the 23 states reported). Pennsylvania's GGR tax structure differs based on revenue component, as follows.

- The effective GGR tax rate on slot revenue was 54 percent, which is applicable to net slot revenue (i.e., net of promotional credits or plays) – while the effective rate on gross slot revenue was nearly 44 percent. As a percentage of net (or taxable) slot revenue, the following was the breakout:
 - State tax at 34 percent
 - Local share assessment at 4 percent
 - Pennsylvania Gaming Economic Development and Tourism Fund at 5 percent
 - Remainder, or 11.1 percent, to Pennsylvania Race Horse Development Fund
- The effective GGR tax rate on table games revenue was 15.4 percent, applicable to gross table games revenue. This was broken into two components:
 - State tax at 14 percent for the first two years following commencement of table games operations at each location. After the initial two years, the tax rate drops to 12 percent. However, fully automated electronic table games were taxed at 48 percent.
 - Local share assessment at 2 percent

We believe a big part of the success of the Pennsylvania casino industry (as measured by GGR and resultant tax revenue collected) is the strategic planning applied to the location of casinos (i.e., geographically distributed in, or nearby to, major population centers along with exclusivity zones) coupled with two distinct GGR tax structures, recognizing the differing business models and constraints associated with GGR stemming from either slot or table games revenue.

Under certain casino gaming expansion scenarios provided by the Florida Legislature, we believe the Florida gambling landscape would share some synergies with the Pennsylvania gambling landscape, as we consider the following:

¹⁰¹ Spectrumetrix US Gross Gaming Revenue Analysis (a product of Spectrum Gaming Group).

- Pennsylvania has an adult population of 9.43 million (which translates into a ratio of 65 percent of Florida's adult population).
- Florida (at 17.3 percent) has the nation's highest percentage of 65-and-older adults within its total population, while Pennsylvania (at 15.4 percent) is fourth, according to the 2010 census.¹⁰²
- In Pennsylvania, four out of five adult residents (83 percent) are within a reasonable one-hour drive time of a Pennsylvania casino, while over half of Pennsylvania adults (53.2 percent) live within a reasonable 30-minute drive time from a Pennsylvania casino. Conversely, only 2 percent (177,200) of Pennsylvania adults live beyond a two-hour drive time from any casino in the state.
- Currently, of the existing 15 casinos in Florida, 56 percent of Florida adults are within a one-hour drive of a Florida casino. However, under the expansion scenario with 20 additional pari-mutuels (or casinos) throughout Florida (and at their current locations) 97.1 percent of Florida adults would be within a one-hour drive of a Florida casino. Additionally, under this scenario, nearly all Florida adults (at 99.8 percent) would be within a two-hour drive of a Florida casino.

We must note certain caveats as well:

- Many Pennsylvania casinos are placed near the state's borders, where they draw significant revenue from neighboring states. That cannot be replicated in Florida, a peninsula where population centers are situated far from the few state borders.
- Pennsylvania does not have a tourism industry that is as large, or economically important, as Florida's.

Leveraging Gaming Revenue Streams for Public Funding

In this section, we evaluate the economies of leveraging the revenue stream provided by gaming as sources for public funding of education, transportation, underwriting risks associated with a catastrophic hurricane event in Florida, and other public funding needs.

State and other taxing entities occasionally have utilized gaming-related revenues to issue municipal and similar debt offerings. Among those, lottery-backed bonds have been successful. While, in general, the benefits of such issuances are the ability to raise and dedicate a large and impactful sum of money, such issuance has been infrequent across the country and can be controversial. For the few such deals that have been completed, and for some of those contemplated, there often were significant controversies around gaming revenue as an unsuitable financing source, or the project being funded as unsuitable for public funding.

¹⁰² "Senior Citizen Population by State," <http://usliberals.about.com/od/Election2012Factors/a/Senior-Citizen-Population-By-State.htm> (accessed August 8, 2013)

The appeal of issuing tax-exempt bonds backed by the revenue of a newly constructed casino is that it enables the government entity to procure future gaming tax revenue immediately, in one lump sum, which could provide substantial public impact. A municipal bond issuance can be an effective and expedient way to provide funding for such needs as school construction, transportation or other infrastructure; to mitigate underwriting risks associated with a natural disaster; or simply to plug a hole in the coming years' budget. Large, upfront funding also could compel later utilization of funds for the planned purpose (i.e., via debt service and debt retirement) so that the tax revenues do not later get diverted via the political process to other budgetary exigencies.

There are several drawbacks to such financing as well. For a state like Florida that has an Aa1 rating and most recently issued lottery bonds at a coupon rate of 5 percent (which translates into an effective rate of 2.75 percent on those bonds), a gaming-based Revenue Bond might not generate a higher rating.¹⁰³ Depending on the degree of state support, the rating might even be lower and the cost to the state higher.

Gaming revenues are sensitive to swings in the economic environment, as gaming is a highly discretionary form of entertainment. This contrasts to staples such as food, clothing and health-related products, or discretionary items with a long shelf life such as spending for home improvements, electronics and sporting goods. Since state governments have legalized gaming in order to establish an ongoing revenue stream to the state for the life of the gaming facility, issuing a tax-exempt bond means that future gaming revenue taxes would be pledged for debt service for the duration of the bond, at the expense of other future uses.

Following is what Spectrum believes is a comprehensive list of tax-exempt bonds backed by gaming revenues since 2005:

¹⁰³ State of Florida issuer page, Moody's Investors Service, <https://www.moody.com/credit-ratings/Florida-State-of-credit-rating-600024224>

Figure 89: Tax-exempt gaming revenue-backed bond issuance, 2005-2012

Issuer	Bond Name	Date of Issuance	Amount	Interest Rate	Fixed/ Variable	Credit Rating	NA or Government	Maturity	Revenue Pledge
Seminole Tribe	Series 2007A Special Obligation Bonds	2007	\$113	5.25%	Fixed	Ba1	Native American	2027	Gaming
Seminole Tribe	Series 2007A Special Obligation Bonds	2007	\$60	5.75%	Fixed	Ba1	Native American	2022	Gaming
Seminole Tribe	Series 2007A Special Obligation Bonds	2007	\$66	5.50%	Fixed	Ba1	Native American	2024	Gaming
Seminole Tribe	Series 2007B Special Obligation Bonds	2007	\$219	7.80%	Fixed	Ba1	Native American	2020	Gaming
Seminole Tribe	Series 2008A Special Obligation Bonds	2008	\$105	8.03%	Fixed	Ba1	Native American	2020	Gaming
Seminole Tribe	Series 2010A Tax Exempt Bonds	2010	\$37	5.13%	Fixed	Baa3	Native American	2017	Gaming
Cabazon	Series 2003A Revenue Bonds	2003	\$111	NA	Fixed	NA	Native American	NA	Gaming
Cabazon	Series 2003B Subordinate Revenue bonds	2003	\$35	NA	Fixed	NA	Native American	NA	Gaming
Oregon	Lottery Revenue Bonds Series 2009A	4/2/09	NA	5.00%	Fixed	Aa2	Government	4/1/2019	Lottery
Oregon	Lottery Revenue Bonds Series 2009D	12/09	NA	5.00%	Fixed	Aa2	Government	4/1/2015	Lottery
Oregon	Lottery Revenue Bonds Series B	4/25/12	\$74	4.00%	Fixed	Aa2	Government	4/1/2016	Lottery
CRDA	\$236M Parking Fee Revenue Bonds	2005	\$236	5%-5.25%	Fixed	Baa2	Government	2018-2025	Gaming
Detroit	Swap continuation agreement	2009	\$400	5.67%	Fixed	NA	Government	2035	Gaming
Florida	Lottery Revenue Bonds Series 2005A	2/15/05	NA	4.38%	Fixed	A1	Government	7/1/2023	Lottery
Florida	Lottery Revenue Bonds Series 2006A	4/1/06	NA	5.00%	Fixed	A1	Government	7/1/2016	Lottery
Florida	Lottery Revenue Bonds Series 2006B	10/1/06	NA	5.00%	Fixed	A1	Government	7/1/2016	Lottery
Florida	Lottery Revenue Bonds Series 2007A	7/1/07	NA	5.00%	Fixed	A1	Government	7/1/2017	Lottery
Florida	Lottery Revenue Bonds Series 2007B	12/1/07	NA	5.00%	Fixed	A1	Government	7/1/2015	Lottery
Florida	Lottery Revenue Bonds Series 2008A	4/15/08	\$315	5.00%	Fixed	A1	Government	7/1/2023	Lottery
Florida	Lottery Revenue Bonds Series 2008B	7/15/08	NA	5.00%	Fixed	A1	Government	7/1/2023	Lottery
Florida	Lottery Revenue Bonds Series 2009A	3/1/09	NA	4.50%	Fixed	A1	Government	7/1/2017	Lottery
Florida	Lottery Revenue Bonds Series 2010A	3/11/10	NA	5.00%	Fixed	A1	Government	7/1/2017	Lottery
Florida	Lottery Revenue Bonds Series 2010B	3/11/10	NA	5.00%	Fixed	A1	Government	7/1/2017	Lottery
Florida	Lottery Revenue Bonds Series 2010C	3/11/10	\$300	5.00%	Fixed	A1	Government	7/1/2017	Lottery
Florida	Lottery Revenue Bonds Series 2010D	9/2/10	NA	5.00%	Fixed	A1	Government	7/1/2016	Lottery
Florida	Lottery Revenue Bonds Series 2010E	9/30/10	\$223	5.00%	Fixed	A1	Government	7/1/2017	Lottery
Florida	Lottery Revenue Bonds Series 2010F	11//10	\$174	5.00%	Fixed	A1	Government	7/1/2019	Lottery
Florida	Lottery Revenue Bonds Series 2011A	9/29/11	\$226	4.00%	Fixed	A1	Government	7/1/2023	Lottery
Florida	Lottery Revenue Bonds Series 2012A	12/6/12	\$90	5.00%	Fixed	A1	Government	7/1/2023	Lottery

Source: Fidelity.com, Moody's Investors Service, municipalbonds.com, Division of Bond Finance.

What follows is an analysis of municipal bond issuance backed by different forms of gaming revenue.

1. Background¹⁰⁴

Issuing municipal bonds remains an attractive form of financing for state and local governments, like Florida, mainly due to the bonds' tax-exempt status. Because the interest earned by bondholders is not taxable, investors in municipal bonds will accept interest rates lower than for a comparable corporate bond, for which the interest income is taxable. Amortization schedules can be lengthier for tax-exempt bonds, typically ranging from 20-30 years. In order for a government to issue tax-exempt bonds, the use of proceeds is required to be for an essential government function, such as building and maintaining schools, streets, highways, bridges, hospitals, utilities and other public projects.

There are two main types of tax-exempt bonds: 1) General Obligation Bonds, in which principal and interest payments are secured by the full faith and credit of the issuer and supported by the issuer's taxing power; and 2) Revenue Bonds, in which principal and interest are secured by the underlying project or revenue source.

Notably for purposes of this report, both the Seminole Tribe of Florida (as noted in our first report) and the state of Florida have earned investment-grade ratings on their debt. About one month ago, Fitch Ratings affirmed AAA ratings on Florida's general obligation bonds and AA+ ratings on its "appropriations backed" bonds, while revising the overall outlook from "negative" to "stable."¹⁰⁵

Among other factors, Fitch cited the state's financial management practices and its long-term economic outlook as factors supporting the strong rating. Fitch wrote:

The Florida economy has been characterized by rapid growth, economic broadening, and diversification as it was transformed from a narrow base of agriculture and seasonal tourism into a service and trade economy, with substantial insurance, banking and export components. Florida's poor economic performance in the downturn and its slow recovery from the recession largely reflect the state's severe housing market correction following an historic run-up. The housing market is improving, although prices and housing starts are still well below pre-recession levels. The homeowner vacancy rate is declining and construction activity has resumed, with housing starts on track for much faster growth. Foreclosure activity remains much higher than the national average but is down substantially from its peak.

Strong underlying fundamentals remain, including a relatively low cost of living, attractive tourist and retirement destinations, and favorable geographic location. The state's natural amenities include 2,200 miles of tidal shoreline, proximity to Latin

¹⁰⁴ Michael Johnson, "The Basics Of Municipal Bonds," MunicipalBonds.com, July 1, 2013; <http://www.municipalbonds.com/education/read/250/the-basics-of-municipal-bonds/>.

¹⁰⁵ "Fitch Affirms Florida GO Bonds at 'AAA'; Outlook Revised to Stable," August 23, 2013 <http://www.marketwatch.com/story/fitch-affirms-florida-go-bonds-at-aaa-outlook-revised-to-stable-2013-08-23>

American and Caribbean markets, and the presence of some of the world's most popular tourist destinations, large convention venues, and major cruise ship ports.¹⁰⁶

In general, in this report, we are reviewing Revenue Bonds which are tied to state tax receipts from gaming operations.

2. Lottery – The Strongest Credit

Lottery revenues have been used by several states to raise funds in municipal bond offerings. The states of Florida and Oregon have issued tax-exempt bonds backed by lottery revenue proceeds, which have been well-received in the market.¹⁰⁷ Oregon issued \$160 million of tax-exempt bonds in 2011 for the purpose of funding state projects, to fund interest reserve accounts for other outstanding bond deals and for general governmental purposes. The bonds were issued at an interest rate of 5 percent with a long maturity profile and, in this context, they were considered very low risk by the rating agencies. At the time, Moody's and Standard & Poor's, the rating industry leaders, rated these securities Aa2 and Aaa, respectively. Characteristic of any revenue bond is the collateral pool of pledged revenue that backs the principal and interest payments. Lottery bonds are backed by lottery revenue, less operating expenses and prize payouts.¹⁰⁸

The credit quality of lottery-backed bonds is considered strong. This is because the lottery revenue stream is considered to be stable, as it is believed to be minimally affected by competition from other gambling-related activities or economic recession. Credit weaknesses cited by Moody's include the lottery's dependence on game diversity, steady introduction of new games and expansion of the lottery in neighboring states.

In the case of Florida, Fitch Ratings cited similar factors – as well as solid debt service coverage and strong management – in assigning an A+ rating to the lottery revenue bonds issued last year.¹⁰⁹ Fitch noted that Florida “has covenanted that any other similar state gaming revenues would be first applied to debt service on lottery revenue bonds. Specifically, the state legislated in 2006 that any revenue derived from the tax on slot machine revenues, although not directly pledged, shall first be available to pay lottery revenue bond debt service in the event that lottery revenues prove insufficient. This provision applies to revenues generated by the slot

¹⁰⁶ Ibid.

¹⁰⁷ Brian Chappatta, “Lottery Securities Beating AAA Provide Winning Bet,” April 16, 2012; businessweek.com; <http://www.businessweek.com/news/2012-04-16/lottery-securities-beating-aaa-provide-winning-bet-muni-credit>.

¹⁰⁸ “State of Oregon Department of Administrative Services Oregon State Lottery Revenue Bonds,” Oregon Lottery Revenue Bonds official Statement, March 13, 2011.

¹⁰⁹ “Fitch Rates Florida's \$88MM Lottery Revs 'A+'; Outlook Stable,” October 24, 2012 <http://www.businesswire.com/news/home/20121024006650/en/Fitch-Rates-Floridas-88MM-Lottery-Revs-Outlook>

machines at pari-mutuel sites in Broward County since 2006, as well as revenues from Miami-Dade County, which voted in 2008 to allow slot machines at three pari-mutuel sites, the first of which opened in October 2009.”¹¹⁰

In the case of the Oregon Lottery, debt service had increased as a percentage of total lottery revenue, due to a decline in net revenue in 2010. The complication that surfaces with such a drop in net revenue is that the lottery revenue not pledged for debt service is already earmarked for other funding needs of the state. To deal with this funding issue, the terms of the bond offering requires the State of Oregon to contribute 50 percent of first quarter net revenues to the debt service account with the remaining 50 percent transferred to other funding needs. The remaining debt service shortfall is funded in the next quarterly revenue transfer. This mitigates the risk of having inadequate funds to pay debt service due to funding other projects that are budgeted at the beginning of the fiscal year. Overall, lottery bonds have the best credit profile among the gaming-related revenue issuance that we analyzed.^{111, 112}

3. Other Gaming Revenue as Form of Collateral

a. Atlantic City, NJ

Gaming revenues were used indirectly by the New Jersey Casino Reinvestment Development Authority (“CRDA”) to issue Revenue Bonds. The CRDA’s purpose is to govern the uses of the capital contribution the state receives from the city’s 12 casinos. In March 2005, the CRDA issued \$107.1 million in tax-exempt bonds with interest rates ranging from 5 percent to 5.25 percent and a rating of Baa2. Use of proceeds was to refinance non-taxable bonds outstanding, the financing of Boardwalk revitalization programs including property acquisition, façade improvements, parking facilities, new retail and dining venues and other economic projects in Atlantic City.¹¹³ Maturities for the recent issuances range from 2018-2025, making them 15- to 20-year bonds. These bonds are backed by two distinct sources of revenue:

- Parking Revenue: Paid at each of the 12 Atlantic City casinos by patrons (or paid by the casino if they provide complimentary patron parking).

¹¹⁰ Ibid.

¹¹¹ Kimberly Lyons, “Moody’s assign Aa2 rating to \$184 million Oregon Department of Administrative Services Oregon state lottery revenue bonds series 2011,” Moody’s Investors Service, March 9, 2011; https://www.moodys.com/research/MOODYS-ASSIGNS-Aa2-RATING-TO-184-MILLION-OREGON-DEPARTMENT-OF-New-Issue--NIR_16852433.

¹¹² Chris Morgan “Summary: Oregon, Oregon Department of Administrative Services; Miscellaneous Tax,” Standard & Poor’s, March 11, 2011.

¹¹³ New Jersey Casino Reinvestment Development Authority annual report 2008; <http://www.njcrda.com/uploads/1/1/6/5/11659441/2008finalaudit.pdf>.

- Investment Alternative Tax (“IAT”): Each Atlantic City casino contributes 1.25 percent of gross gaming revenue to the CRDA pursuant to legislation passed in 1984.¹¹⁴

According to a Moody’s report in April 2013, approximately 71 percent of the revenue pledged to cover debt service is sourced from parking receipts and 29 percent is sourced from gaming revenue. The Atlantic City casinos have entered into credit agreements that pledge the IAT to provide security/collateral to these bond issuances. These funds are paid to the CRDA, as issuer, to fund their debt service.

The credit discussion in Moody’s research about this issuance is centered on the declining performance of the Atlantic City gaming market. Declines to GGR means the dollar amount of the IAT is also decreasing (parking revenue did not decrease because Atlantic City had a new casino, Revel, open that year). This results in a narrowing of the level of debt service coverage that the CRDA can provide to bondholders. Additionally, the rating agencies focused on the fact that all of the revenue backing this issuance is sourced from a limited geographic region. In a region where all of the casinos are in close proximity to each other, like Atlantic City’s Boardwalk and Marina District, the entire collateral pool is vulnerable to downturns in the local economy or from increased competition nearby.¹¹⁵ Although the CRDA debt has not been downgraded, it does have a negative outlook.

At the time that the CRDA contribution laws were passed, public sentiment centered on the fact that Atlantic City was going to be the sole beneficiary in the state of the infrastructure improvements that are funded by these bonds. As a result, a portion of the IAT and parking revenue funds that back tax-exempt CRDA bonds is deployed in other parts of the state.¹¹⁶

b. Detroit, MI

Another example of a government entity using gaming revenues to address its financing needs is the City of Detroit. In 2006, Detroit entered into swap agreements with two financial institutions as counterparties for the purposes of mitigating interest rate risk on the city’s \$948 million Retirement System Funds issuance. A condition of that agreement was that the City had to maintain its investment-grade credit rating.

¹¹⁴ Casino Reinvestment Development Authority annual report 2012; <http://www.njcrda.com/wp-content/uploads/CRDA.12.31.12.-financial-statementspdf.pdf>.

¹¹⁵ Josellyn Yousef, “Moody’s confirms Baa2 rating on Casino Reinvestment Development Authority’s (NJ) \$236 million Parking Fee and Atlantic City Fund Revenue Bonds outstanding, Series 2005A and 2005B,” Moody’s Investor Service, March 22, 2013; https://www.moodys.com/research/Moody’s-confirms-Baa2-rating-on-Casino-Reinvestment-Development-Authoritys-NJ--PR_269436

¹¹⁶ August 9, 2013, interview with Josellyn Yousef, Lead Analyst, Public Finance Group, Moody’s Investors Service.

In January 2009, Standard & Poor's lowered Detroit's BBB investment grade rating to BB, which is in the speculative grade category. This move triggered a counterparty request to terminate the swap pursuant to the 2006 swap agreement terms. The breakup fee cost to the City was to be approximately \$400 million.

Given Detroit's financial troubles at the time, the City arranged for a different solution to maintain its swap agreement and avoid having to pay the breakup fee. Detroit pledged the gaming tax revenue it would generate from its three commercial casinos as a collateral/guarantee backing the annual swap payment. The city also agreed to a \$50M annual payment to the counterparties, a payment that is based on a 5.67 percent interest rate to maintain the swap agreement. The maturity of this agreement was 2035 (25 years).¹¹⁷ For a city in distress like Detroit, pledging gaming revenue enhanced its status as a credit and enabled it to continue the swap agreement while satisfying the counterparty needs for adequate collateral.

Although the swap payment, backed by gaming revenue, is not a bond issuance, the recent news that Detroit is declaring bankruptcy does provide insight into gaming revenue as a viable collateral pool. It has been reported in *crainsdetroit.com* and *The Bond Buyer* that due to the fact that the swap agreement of 2009 is backed by gaming revenue, the swap counterparty is considered a senior secured lender and "at the front of the line" of Detroit's long list of creditors. Bloomberg News reported that because the financial institution counterparty has a pledge of gaming revenue as collateral, it has the same seniority as municipal bond investors that may have invested in Detroit's sewer or water bonds.¹¹⁸ If that is true, then one can argue that irrespective of the revenue source, tax-exempt bonds backed by gaming revenue should be no different than municipal bonds backed by government entities in terms of their pricing, maturities and marketability.

4. Public Reaction to Recently Proposed Deals

Spectrum found two recent instances where a municipality is planning to issue, or has contemplated issuing, bonds backed by gaming revenue – in one case to finance the acquisition and redevelopment of a casino, and in the second case, to finance the building of a stadium. Both these examples illustrate the kind of media attention and public scrutiny that gaming-backed issuances can incite due to uncertainty surrounding gaming revenue.

- **The City of Davenport:** Davenport, IA, is the home of Rhythm City Casino, owned by Isle of Capri Casinos Inc. of St. Louis, MO. Due to significant declines in gaming revenue at the property as a result of expansion to a nearby, larger casino owned by

¹¹⁷ Yvette Shields, "Cash-Poor Detroit Resolves Swaps Mess," *The Bond Buyer*, July 22, 2009; https://secure.bondbuyer.com/issues/118_139/-305544-1.html

¹¹⁸ Bloomberg News, "Interest-rate swap firms could get paid first as Detroit bankruptcy loom," June 21, 2013. <http://www.crainsdetroit.com/article/20130621/NEWS01/130629981/interest-rate-swap-firms-could-get-paid-first-as-detroit-bankruptcy>

the same company, and the resultant declines in payments to the City of Davenport, the City wanted to convert the riverboat casino into a land-based property at a better location to increase profitability and payments to the city. After a disappointing initial sale process, Davenport officials initiated a proposal for the city to buy the casino and move it to the land-based site.

- The City contemplated a \$150 million, tax-exempt bond issuance for this project, with \$50 million used to acquire the casino and \$100 million for redevelopment. We interviewed Brandon Wright, the Director of Finance for the City of Davenport, who was leading the financing plan. He stated that given Davenport's A2 credit rating and that the City's last general obligation municipal bonds issuance priced at 2.8 percent, this issuance likely would cost double, at about 5.5 percent. The increased pricing was mainly due to the fact that the bond was going to be backed by gaming revenue, which was then not considered reliable, based on the riverboat location.^{119, 120}
- Many politicians were staunchly opposed to a municipality owning a casino itself, much less incurring debt to finance the acquisition. In terms of the bond, the expectation of a high interest rate and general uncertainty around the level of gaming revenue that could reasonably be generated from a new land-based property brought about significant opposition to the plan. The deal never came to fruition due to the political unease, and a private developer has since taken over the project.
- **Minnesota Vikings stadium financing:** In March 2012, the City of Minneapolis and the Minnesota Vikings of the National Football League agreed to terms for building a new football stadium. The total construction cost is \$975 million and the Vikings agreed to contribute \$477 million, with the City of Minneapolis and the State of Minnesota committing the remaining funds. The state portion of the financing, estimated at approximately \$348 million, are expected to be raised by issuing municipal bonds.
 - The revenue being appropriated for the purpose of servicing these bonds over time is from tax revenues from electronic charitable gaming revenues. Charitable gaming, which has been legal in Minnesota since the mid-1980s, contributed \$37 million to the State in 2011, according to the *Minneapolis Post*. The state expanded the availability of electronic gaming, including at the airport, where officials budgeted \$3 million in annual revenue contribution for

¹¹⁹ Kurt Allemeier, "Financial Experts call Davenport plan to buy casino risky," *Quad City Business Journal*, November 30, 2012; http://qctimes.com/business/financial-experts-call-davenport-plan-to-buy-casino-risky/article_c7af6bbc-3a51-11e2-88e7-0019bb2963f4.html

¹²⁰August 8, 2013, interview with Brandon Wright, Director of Finance, City of Davenport.

purposes of debt service relating to this financing. The results for the first six months of 2013 indicate that the State will be well short of its projections. The electronic pull tab machines there have generated only \$33,586 during that span, according to the *Star Tribune*.^{121, 122, 123}

- In Minnesota, there has been a plethora of articles that question the viability of gaming revenue-backed bond issuance. The issues raised include the lack of a long history of success of electronic pull-tabs and the uncertainty of whether gaming revenue will be enough to pay principal and interest payments on the bonds. Of greatest concern is if gaming revenue is not sufficient to cover debt service, what other source of revenue would be appropriated for the purpose of paying the principal and interest on the bonds? At the time of this report, the deal is planned for September 2013 and continues to be challenged in the media.¹²⁴

It is telling that in the case of Davenport, IA, the proposed purchase of a casino never had enough backing for it to come to fruition. The public view was that it is just too risky to leverage the casino's earnings in such a way and that it was imprudent for a city to enter the casino business. It is of no surprise to Spectrum that this deal did not get completed.

Minnesota's proposed bond deal will be an important development to watch, particularly because it appears likely to be completed. The groundbreaking is expected to take place in October 2013, and the stadium is expected to be completed for the 2016 NFL season. Given the commitment by the State to provide \$348 million in financing, we believe that the State may be forced to address the underwhelming charitable gaming revenue results to date; this will be telling as to market and public reaction to gaming-based Revenue Bonds in an increasingly competitive and dilutive gaming environment.

5. Native American Issuance

Native American nations and tribes, like most state and local governments, have access to the tax-exempt bond market and have used municipal finance more extensively for gaming-related issuances. The lower relative cost of tax-exempt financing is appealing to tribes for the same reason as it is to municipalities. Tribes have access to the tax-exempt bond market for the

¹²¹ Minnesota Vikings website; <http://www.vikings.com/stadium/new-stadium/index.html> (accessed August 9, 2013).

¹²² Sean Olson, "Shaky foundation for new Vikings stadium?" MinnPost, March 14, 2012. <http://www.minnpost.com/minnesota-blog-cabin/2012/03/shaky-foundation-new-vikings-stadium>.

¹²³ Jean Hopfensperger, "Airport e-gambling showing poor payoff for Vikings stadium," *StarTribune*, 8/5/2013; <http://www.startribune.com/local/minneapolis/218445161.html>.

¹²⁴ Ibid.

funding of “essential government services” similar to state governments. This includes government buildings, utilities, infrastructure and schools, for example.

We believe a review of the tribal finance can be helpful as a reference for the State of Florida in its review of the topic because tribes have successfully accessed this market time and again. Specifically, the Seminole Tribe of Florida, owner of seven casinos in Florida, has been a prominent tax-exempt bond issuer over the last decade. The Seminole Tribe has been involved in controversial tax-exempt financings as well as successful issuances, and they continue to access the tax-exempt market today.¹²⁵ A review of its successfully completed deals can provide insight as to the value of the gaming revenue stream on a standalone basis.

In 2002, the Seminole Tribe issued \$345 million in 30-year tax-exempt bonds in order to construct two resorts in Hillsborough and Broward counties. Capital Trust Agency, a state agency commissioned to, among other things, issue debt for public projects in Florida, raised the debt in the tax-exempt market and then made a loan to the Tribe. Using a third party, like Capital Trust Agency, to issue tax-exempt debt is known as conduit financing.¹²⁶

Conduit financing was an effective way for the Tribe to obtain tax-exempt bonds, but after the fact, there was great controversy. The method by which the Seminole Tribe went about this transaction was investigated by the IRS, which was of the opinion that the financing circumvented the “essential government services” requirement. Lawyers argued that the Tribe, being the borrower not the issuer, had no bearing on the tax-exempt status of the bonds. In December 2004, the IRS mandated that the Seminole Tribe repay the tax-exempt bonds outstanding by December 2005, disallowing the tax exemption; the Seminole Tribe issued \$730 million of taxable bonds to repay the tax-exempt issuance in October 2005. This prevented any further lawsuit by tax-exempt bondholders, due to the fact that pursuant to the IRS ruling, the bondholders would have to pay taxes on their interest income from what was supposed to be a tax-exempt deal.¹²⁷

Since 2005, the Seminole Tribe has accessed the tax-exempt bond market by issuing tax-exempt “gaming division bonds.” They are secured by a pledge of revenue generated by the Tribe’s gaming facilities. The bonds are private placements and not registered with the SEC. The use of proceeds are for capital expenditures and improvements to the Tribe’s properties as well

¹²⁵ Hyatt Townsend, Perry Israel, Alan Benjamin, “An introduction to Tribal Finance,” Orrick Herrington & Sutcliffe, 2005; <http://www.orrick.com/Events-and-Publications/Documents/246.pdf>.

¹²⁶ Robert Little, “IRS Seeks Probe of \$455 million Tax-Exempt Bonds Used to Build Two Seminole Hard Rock Hotel and Casino Complexes in Florida,” Hotel Online, May 8, 2004; http://www.hotel-online.com/News/PR2004_2nd/May04_CasinoBonds.html.

¹²⁷ Christina Hoag, “Seminole Tribe sells \$730 million in Taxable Bonds to Redeem \$560 million in Tax Exempt Bonds that IRS Claims Were Improper for Florida’s Hard Rock Gaming Resorts,” Hotel Online, October 14, 2005; http://www.hotel-online.com/News/PR2005_4th/Oct05_SeminoleBonds.html.

as for general governmental purposes. The Seminole Tribe has issued six tax-exempt bonds since 2007, with rates ranging from 5.13 percent to 8.03 percent.^{128, 129}

6. Covenants

Municipal issuers are bound by credit agreements and their related restrictions, just like any other issuer. A gaming-based issuance may therefore bring additional risks to the state, related specifically to the operations of the casinos. There are two types of covenants typically found in bond indentures – incurrence tests and maintenance tests. Incurrence tests are conditions that must be in place for the issuer prior to receiving any new financing. Maintenance tests are conditions that must be met by the issuer at specified times (quarterly/annually), while the bonds are outstanding, pursuant to terms and conditions set forth in the credit agreement.

In our analysis of tax-exempt issuances, we uncovered several incurrence and maintenance tests that essentially govern the issuer’s ability to raise additional debt and its decision-making as to where its revenues can and cannot be appropriated. The following is a description of such covenants found in lottery-backed bonds and gaming-revenue bonds issued by the New Jersey CRDA.

- **Additional Bonds Test:** This is an incurrence test that limits the ability of an issuer to incur additional debt, such that it cannot maintain certain ratios and coverage after that debt is incurred. An example of additional bonds tests are:
 - *Historical average revenues/debt service:* A specific limit on this ratio might be an incurrence test found in a municipal bond credit agreement.
 - *Maximum debt service amount:* A credit agreement may state that an issuer can only issue debt if net revenue proceeds generated during a stated time period are at least a pre-determined number of times the maximum annual debt service on all outstanding bonds and additional bonds to be issued. Alternatively, we have seen that the municipality’s revenue projections must show that net revenue proceeds that are pledged to pay debt service are equal to at least four times maximum annual debt service on outstanding and newly issued debt.
- **Revenue Appropriation Requirement:** This covenant requires that “first in” revenues must be appropriated for the purpose of funding debt service. The

¹²⁸ Keith Foley, “Rating Action: Moody’s raises Seminole gaming ratings to Baa3,” Moody’s Investors Service, September 14, 2007; https://www.moodys.com/research/Moody's-raises-Seminole-gaming-ratings-to-Baa3-new-459-mil--PR_140784.

¹²⁹ Keith Foley, “Rating Action: Moody’s upgrades Seminole Tribe ratings to Baa3,” Moody’s Investors Service, April 2, 2013; https://www.moodys.com/research/Moody's-upgrades-Seminole-Tribe-ratings-to-Baa3-assigns-Baa3-to--PR_269885.

goal of this test is to ensure that debt service is the first priority of payment above any other permissible use of pledged revenues.

- **Debt Service Reserve Requirement:** This is a maintenance covenant that ensures the issuer maintains sufficient funds in the reserve account to satisfy principal and interest payments on outstanding bonds. An example of such a covenant is that the issuer must maintain the lesser of the following in its debt service account: either 125 percent of average debt service or 10 percent of total bond proceeds.
- **Moral Obligation Pledge:** These are covenants where the state will pledge that it will authorize procurement of emergency funds if the reserve account falls below required levels pursuant to the bond documents.^{130, 131, 132}

The covenants that deal with revenue present specific challenges when the revenue in question comes from gaming. As stated earlier, gaming revenue may not be a suitably stable revenue source, as it is a highly discretionary form of entertainment. The state will have to negotiate either lenient covenants as they relate to gaming revenue or negotiate covenants that focus more on reserve requirements and debt service account levels, if it were to consider issuing non-taxable bonds.

7. Conclusion

Issuing debt backed by gaming revenue can accelerate a large portion of future gaming tax revenues, enabling the state to fund large public benefit construction projects such as schools, hospitals and infrastructure, or to mitigate underwriting risks associated with a natural disaster or, simply, to plug a budget hole. The state also could assure allocation of funds for a specific purpose by “locking in” the obligation via a debt service commitment. The public may read this positively, as the state pursuing an opportunity to deal with a compelling and timely new funding requirement.

¹³⁰ Kimberly Lyons, “Moody’s assign Aa2 rating to \$184 million Oregon Department of Administrative Services Oregon state lottery revenue bonds series 2011” Moody’s Investors Service, March 9, 2011; https://www.moodys.com/research/MOODYS-ASSIGNS-Aa2-RATING-TO-184-MILLION-OREGON-DEPARTMENT-OF-New-Issue--NIR_16852433.

¹³¹ Chris Morgan “Summary: Oregon, Oregon Department of Administrative Services; Miscellaneous Tax,” Standard & Poor’s, March 11, 2011.

¹³² Josellyn Yousef, “Moody’s confirms Baa2 rating on Casino Reinvestment Development Authority’s (NJ) \$236 million Parking Fee and Atlantic City Fund Revenue Bonds outstanding, Series 2005A and 2005B,” Moody’s Investor Service, March 22, 2013; https://www.moodys.com/research/Moody’s-confirms-Baa2-rating-on-Casino-Reinvestment-Development-Authoritys-NJ--PR_269436.

¹³² August 9, 2013, interview with Josellyn Yousef, Lead Analyst, Public Finance Group, Moody’s Investors Service.

Aside from lottery-backed financing, gaming revenue financing deals are inherently complicated from a political and public perception point of view. As exhibited in the case of Davenport, IA, interest rates on debt backed by gaming revenue may be significantly higher than they would be for general-obligation bonds and therefore could be interpreted that the issuer is financially distressed or, simply, employing misguided strategy.

A long-term consideration is the sensitivity of gaming-related revenues to local economic swings and increased competitive pressures. If the state treats gaming revenue taxes as an annual income stream that is earmarked for specific budgetary items, as it has been traditionally, lower revenue from gaming may be made up elsewhere, or the state/municipality can make adjustments to its budget to deal with income shortfalls. In a case where the state issues bonds backed by gaming revenue, there can be a significant funding issue if gaming revenue does not meet projections.

Such shortfalls may come from the long-term impacts of economic cycles and nearby competition, but it also can come from sudden catastrophes such as hurricane damage. Casino closures and disruptions have been well-documented in New Jersey, due to storms such as Superstorm Sandy,¹³³ and for riverboats along the Mississippi River due to flooding in 2011.¹³⁴

The absence of many comparable transactions may illustrate the risks of pursuing gaming-backed Revenue Bonds. With the potential for higher cost, potential instability of the revenue source, risk of adverse public reaction, and foregoing valuable future revenue streams, the strategy of leveraging these revenue streams needs to be approached with caution.

¹³³ Donald Wittkowski, "Casino vendors suffer severe negative impact from casino closures during Hurricane Sandy," *Press of Atlantic City*, November 5, 2012; http://www.pressofatlanticcity.com/news/press/casinos_tourism/casino-vendors-suffer-severe-negative-impact-from-casino-closures-during/article_cb84ee64-26cf-11e2-9d05-001a4bcf887a.html.

¹³⁴ Isle of Capri 2012 annual report.

IV. Estimated Total Spending and Net Economic Impact for Gaming

In this section, we estimate the total spending and net¹³⁵ economic impact for gaming, as well as the change in demand associated with each of several sources including:

- The current visitors who would have come to Florida in the absence of expanded gaming activities, but would choose to spend more during their visit, or extend the length of their visit, if additional casino gaming were available;
- Floridians who now gamble out of state or in Native American casinos who would instead opt to gamble in Florida, if additional local gaming activities were available;
- Floridians who now do not gamble but would participate if additional gaming activities were easily available.
- Visitors who plan a visit to Florida rather than an alternative destination due to the availability of gaming here.
- Visitors who would choose not to visit Florida due to the presence of gaming activities

The Eric Friedheim Tourism Institute at the University of Florida conducted a study on behalf of Spectrum Gaming Group and the Florida Legislature to explore consumer attitudes, perceptions, and intentions toward the possible expansion of gambling in Florida and to gauge the potential impact that expanded gambling could have on the state and its tourism industry. (See Appendix V for full survey.) The insights gleaned from this research were intended to enlighten the discussion on the gambling initiatives and the related economic impact study. In this study, respondents were asked to provide their opinion on the following: (1) preferences for gambling in general and, specifically, expanded gambling in Florida; (2) the likelihood and type of participation in gambling activities in Florida; (3) preferred gambling regulations; (4) travel intentions toward Florida and specific Florida destinations given the presence or absence of expanded gambling venues; and (5) demography and gambling addiction characteristics of the sample given the presence or absence of expanded gaming opportunities in Florida.

Respondents were 18 years¹³⁶ and older and consisted of (1) Adults residing in Florida (n=1223); and (2) adults residing in Non-Florida States (n=1213). The data for this study were

¹³⁵ The net analysis recognizes any reduced spending at other Florida businesses because visitor and resident spending has now flowed to gaming activities.

¹³⁶ The minimum age to buy a lottery ticket in Florida and most other jurisdictions is 18. Some states allow those 18 and older to engage in casino-style gambling. The age parameter is also aligned with several other gambling-related studies.

collected during August 2013. A 20-minute consumer survey was conducted online. Spectrum and Regional Economic Models Inc. (“REMI”) then interpreted the survey results to determine the economic impacts of spending – or prospective spending – on gambling in Florida.

Visitors Who Would Spend More or Stay Longer if More Gaming were Available

In order to understand how current visitors would change their spending behavior if there were additional casino gaming, our survey asked the following question: “*If additional casino gaming were available, would you choose to stay in Florida for a longer period of time?*” Approximately 15 percent of visitors indicated they would extend their stay if gambling was expanded in Florida. Some 28.2 percent of those who would extend their stay said they would stay two more days, while almost 19.7 percent said they would stay an extra week.

Figure 90: Survey results – extending length of stay due to gambling expansion

If gambling was expanded in the state of Florida, would you choose to extend your length of stay? (Non-residents, N=496)		
Yes, I would extend my stay: 14.9% (N=74)		
How many days would you extend your stay?		
Non-residents (N=71)		
Length	Number	Percentage
2 days	20	28.2
7 days	14	19.7
3 days	10	14.1
1 day	7	9.9
14 days	4	5.6
60 days	4	5.6
5 days	2	2.8
10 days	2	2.8
28 days	2	2.8
30 days	2	2.8
4 days	1	1.4
180 days	1	1.4
270 days	1	1.4
365 days	1	1.4

Source: Spectrum Gaming Group, University of Florida

The input to the economic impact simulation represents new GGR gained from these respondents. Over the course of the simulation, the average employment is 41,396 jobs and Gross State Product is \$5 billion.¹³⁷ Total state revenues average \$186.2 million.¹³⁸

¹³⁷ Employment is the count of jobs relative to the base case scenario and is not cumulative. Gross state product is the net new economic activity generated in the state.

Figure 91: Economic impacts of visitors extending stay due to expended gaming, Default Budget

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	44,611	43,478	42,348	41,396	40,612	40,013
Gross State Product	\$4,666	\$4,758	\$4,848	\$4,954	\$5,073	\$5,207
Gaming Taxes	\$25.92	\$26.57	\$27.31	\$28.05	\$28.84	\$29.69
Sales/Use Tax	\$56.66	\$60.69	\$63.66	\$66.06	\$68.60	\$71.32
Lottery	\$5.79	\$5.17	\$4.62	\$4.12	\$3.76	\$3.48
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	\$66.53	\$72.49	\$76.08	\$79.14	\$81.72	\$83.95
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	39,578	39,265	39,007	38,851	41,396	
Gross State Product	\$5,359	\$5,524	\$5,690	\$5,868	\$4,954	
Gaming Taxes	\$30.59	\$31.54	\$32.50	\$33.47	\$28.05	
Sales/Use Tax	\$74.41	\$77.88	\$81.52	\$85.26	\$66.06	
Lottery	\$3.31	\$3.21	\$3.15	\$3.11	\$4.12	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	\$86.39	\$89.16	\$91.75	\$94.19	\$79.14	

Source: Spectrum Gaming Group, University of Florida, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

How Floridians Would Change In-State Spending if Gambling were Expanded/Reduced

In order to understand how Floridians might change their behavior to stay in the state if there was expanded opportunities, our study asked the following question: *“If gambling were expanded in the State would you be more likely to gamble in the State rather than take a trip out of the State?”* Almost half of Florida residents indicated they would more likely gamble in the state if gambling was expanded in Florida. Some 28.6 percent said they would gamble outside the state if current levels of gambling were reduced.

¹³⁸ The average of total state revenues used in this chapter represent annual average revenues to the State, including gaming taxes and tribal Compact revenues.

Figure 92: Survey results – Floridians’ spending on gambling if gambling were expanded/reduced in state

If gambling were expanded in the state, would you be more likely to gambling in the state rather than take a trip out of the state?		
	(N=582)	Mean spending for this group
Florida residents who responded “Yes”	47.6%	\$805.08
If gambling were reduced in the state, would you be more likely to gamble out of the state rather in the state?		
	(N=350)	Mean spending for this group
Florida residents who responded “Yes”	28.6%	\$1,161.19

Source: Spectrum Gaming Group, University of Florida

The input to the economic impact simulation represents new GGR and other tourism spending gained from these respondents. Over the course of the simulation, the average employment is 12,548 jobs and Gross State Product is \$1.3 billion. Total state revenues average \$52.4 million.

Figure 93: Economic impacts of Floridians’ spending on gambling if in-state options expanded/reduced, Default Budget

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	13,575	13,214	12,856	12,548	12,293	12,103
Gross State Product	\$1,259	\$1,279	\$1,298	\$1,323	\$1,352	\$1,385
Gaming Taxes	\$5.92	\$6.03	\$6.18	\$6.33	\$6.49	\$6.67
Sales/Use Tax	\$16.90	\$18.11	\$18.99	\$19.69	\$20.43	\$21.23
Lottery	\$1.69	\$1.50	\$1.32	\$1.17	\$1.06	\$0.97
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	\$19.07	\$20.83	\$21.90	\$22.82	\$23.57	\$24.22
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	11,952	11,828	11,725	11,651	12,548	
Gross State Product	\$1,423	\$1,464	\$1,505	\$1,549	\$1,323	
Gaming Taxes	\$6.87	\$7.06	\$7.26	\$7.47	\$6.33	
Sales/Use Tax	\$22.13	\$23.13	\$24.16	\$25.23	\$19.69	
Lottery	\$0.92	\$0.88	\$0.86	\$0.84	\$1.17	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	\$24.92	\$25.68	\$26.38	\$27.03	\$22.82	

Source: Spectrum Gaming Group, University of Florida, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Floridians Non-Gamblers Who Would Gamble if More Gambling Activities were Available

First, our study asked the following question: “*Have you ever gambled in Florida?*” One-third (N=408) of Florida residents indicated they had not gambled in Florida. In addition, slightly more than half (N=634, 51.8 percent) said they had not gambled in Florida in the past 12 months.

Of those who had not gambled in Florida, half said they were likely to gamble in Florida in the future.

Figure 94: Survey results – Floridian non-gamblers likely to gamble in Florida in the future

	%	Mean spending for this group
Not at all likely	20.0	\$14.54
2	12.2	\$44.44
3	12.8	\$81.66
4	5.0	\$90.15
Extremely likely	1.9	\$118.04
% within how likely are you to gamble in FL in future	51.8	\$49.22

Source: Spectrum Gaming Group, University of Florida

The input to the economic impact simulation represents new GGR gained from these respondents and the reallocation of their spending away from other things. Over the course of the simulation, the average employment is 293 jobs and Gross State Product is \$57 million. Total state revenues average \$1.2 million.

Figure 95: Economic impacts of Floridian non-gamblers being likely to gamble in Florida in future, Default Budget

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	301	297	293	293	288	293
Gross State Product	\$52	\$53	\$55	\$57	\$59	\$61
Gaming Taxes	\$0.66	\$0.68	\$0.69	\$0.71	\$0.73	\$0.75
Sales/Use Tax	\$0.32	\$0.35	\$0.37	\$0.40	\$0.42	\$0.45
Lottery	(\$0.49)	(\$0.49)	(\$0.48)	(\$0.47)	(\$0.47)	(\$0.46)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	\$0.30	\$0.35	\$0.38	\$0.41	\$0.43	\$0.45
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	293	296	303	313	293	
Gross State Product	\$63	\$65	\$67	\$70	\$57	
Gaming Taxes	\$0.77	\$0.80	\$0.82	\$0.84	\$0.71	
Sales/Use Tax	\$0.47	\$0.50	\$0.54	\$0.58	\$0.40	
Lottery	(\$0.46)	(\$0.46)	(\$0.46)	(\$0.45)	(\$0.47)	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	\$0.47	\$0.50	\$0.53	\$0.57	\$0.41	

Source: Spectrum Gaming Group, University of Florida, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Visitors Who Plan Florida Visit vs. Alternative Destination due to Availability of Gaming

Our study asked visitors (non-Florida residents) the following question: “*If Florida expanded gambling opportunities would you come to Florida more often?*” Twelve percent (N=60) of non-Florida residents indicated they would be more likely to come to Florida more often if gambling opportunities were expanded. The input to the economic impact simulation represents new tourism spending of all kinds from these respondents.

Figure 96: Survey results – visitors who would visit more often if Florida expanded gaming

If Florida expanded gambling opportunities would you come to Florida more often?		
	(N=496)	Mean spending for this group
Non-Florida residents who responded “yes”	12.1% (N=60)	\$3,205

Source: Spectrum Gaming Group, University of Florida

Over the course of the simulation, the average employment is 128,376 jobs and Gross State Product is \$10.2 billion. Total state revenues average \$461.1 million.

Figure 97: Economic impacts of visitors visiting more often if Florida expanded gaming, Default Budget

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	138,731	135,296	131,672	128,376	125,682	123,540
Gross State Product	\$9,722	\$9,879	\$10,014	\$10,183	\$10,381	\$10,626
Gaming Taxes	\$20.63	\$21.03	\$21.48	\$21.92	\$22.40	\$22.92
Sales/Use Tax	\$163.74	\$176.42	\$185.52	\$192.58	\$199.89	\$207.68
Lottery	\$15.39	\$13.42	\$11.62	\$9.99	\$8.79	\$7.85
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	\$176.17	\$194.34	\$206.09	\$216.29	\$224.25	\$231.07
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	121,682	120,062	118,660	117,608	128,376	
Gross State Product	\$10,896	\$11,197	\$11,515	\$11,868	\$10,183	
Gaming Taxes	\$23.49	\$24.09	\$24.71	\$25.34	\$21.92	
Sales/Use Tax	\$216.25	\$225.58	\$235.29	\$245.25	\$192.58	
Lottery	\$7.23	\$6.80	\$6.51	\$6.30	\$9.99	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	\$237.99	\$245.06	\$251.56	\$257.60	\$216.29	

Source: Spectrum Gaming Group, University of Florida, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

Visitors Who Would Choose Not to Visit Florida Due to Expanded Gambling

Our study asked visitors (non-Florida residents) the following question: “*If Florida expanded gambling opportunities, would you come to Florida less often?*” Less than 4 percent

(N=19) of non-Florida residents indicated they would come to Florida less often if gambling opportunities were expanded.

Figure 98: Visitors who would choose not to visit Florida due to expanded gambling

If Florida expanded gambling opportunities would you come to Florida more often?		
	(N=496)	Mean spending for this group
Non-Florida residents who responded "yes"	3.8 % (n=19)	\$598.95

Source: Spectrum Gaming Group, University of Florida

The input to the economic impact simulation represents tourism spending lost from these respondents. Over the course of the simulation, the average employment is -7,543 jobs and Gross State Product is -\$598 million. Total state revenues average -\$27.1 million.

Figure 99: Economic impacts of visitors choosing not to visit Florida due to expanded gaming, Default Budget

At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Employment	-8,145	-7,948	-7,737	-7,543	-7,388	-7,258
Gross State Product	(\$570)	(\$580)	(\$588)	(\$598)	(\$609)	(\$624)
Gaming Taxes	(\$1.21)	(\$1.23)	(\$1.26)	(\$1.29)	(\$1.31)	(\$1.34)
Sales/Use Tax	(\$9.61)	(\$10.35)	(\$10.89)	(\$11.30)	(\$11.73)	(\$12.19)
Lottery	(\$0.90)	(\$0.79)	(\$0.68)	(\$0.59)	(\$0.52)	(\$0.46)
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
All other Revenues	(\$10.35)	(\$11.41)	(\$12.10)	(\$12.69)	(\$13.16)	(\$13.56)
At Default Budget/FL Pari-Mutuel Gaming Tax Rate	Year 7	Year 8	Year 9	Year 10	Average	
Employment	-7,151	-7,056	-6,972	-6,905	-7,543	
Gross State Product	(\$639)	(\$656)	(\$676)	(\$696)	(\$598)	
Gaming Taxes	(\$1.38)	(\$1.41)	(\$1.45)	(\$1.49)	(\$1.29)	
Sales/Use Tax	(\$12.69)	(\$13.24)	(\$13.81)	(\$14.39)	(\$11.30)	
Lottery	(\$0.43)	(\$0.40)	(\$0.39)	(\$0.37)	(\$0.59)	
Compact Revenues	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All other Revenues	(\$13.96)	(\$14.37)	(\$14.75)	(\$15.09)	(\$12.69)	

Source: Spectrum Gaming Group, University of Florida, Regional Economic Models Inc. \$ in nominal millions. Revenues in FY.

V. Assessment of Likely Social Costs of Expanded Gaming

In this section, we assess the likely social costs of expanded gaming activities, including problem and pathological gaming-related behaviors and changes in crime rates. The assessment shall compare and contrast credible existing studies of social costs of gaming and provide social cost scenarios to match the preceding economic and fiscal analyses.

The dramatic expansion of gambling during the 20th Century raised a variety of concerns about its impact on the public health and welfare.¹³⁹ These fears stimulated a new era of gambling-related research¹⁴⁰ that holds the potential to inform prevention and treatment efforts as well as shape public policy toward gambling and gambling expansion. As it developed, the scientific literature bifurcated into two primary groups: (1) studies of gambling, and (2) studies of gambling-related problems. This body of work has helped to shape our understanding about who gambles, where and how they gamble, and which gamblers are at the greatest risk for developing gambling-related disorders. As Florida considers possible gambling expansion, a review of this literature will be informative for decision-making.

The scientific literature shows that a variety of interactive factors can influence the development and maintenance of gambling-related disorders. From a public health perspective, we can classify these factors into three primary groups: (1) host (e.g., gambler); (2) agent (e.g., game and game characteristics); and (3) environment (e.g., social setting within which people gamble – including cultural and community influences).¹⁴¹ To date, the majority of research has focused on the host, or gambler, and the games that they play. However, Dr. Howard Shaffer, Director of the Division on Addictions at The Cambridge Health Alliance, a Harvard Medical School teaching affiliate; and Dr. David Korn, Clinical Professor of Pathology at Massachusetts General Hospital,¹⁴² recognized the importance of the social setting when they argued for a public health approach to gambling. Gambling expansion appears to influence the environment primarily; however, the changes to the environment, in turn, affect both the host and the agent.¹⁴³

¹³⁹ David A. Korn, "Expansion of Gambling in Canada: Implications for Health and Social Policy," *Canadian Medical Association Journal* 163, no. 1 (2000); David A. Korn and H.A. Skinner, "Gambling Expansion in Canada: An Emerging Public Health Issue," *CPHA Health Digest*, Autumn 2000; Howard J. Shaffer and David A. Korn, "Gambling and Related Mental Disorders: A Public Health Analysis," in *Annual Review of Public Health*, ed. Jonathan E. Fielding, Ross C. Brownson and Barbara Starfield (Palo Alto: Annual Reviews, Inc., 2002).

¹⁴⁰Gabriel Eber, B. and Howard J. Shaffer, "Trends in Bio-Behavioral Gambling Studies Research: Quantifying Citations," *Journal of Gambling Studies* 16, no. 4 (2000); Howard J. Shaffer, M.V. Stanton, and S.E. Nelson, "Trends in Gambling Studies Research: Quantifying, Categorizing, and Describing Citations," *ibid.*22(2006).

¹⁴¹ Shaffer and Korn, "Gambling and Related Mental Disorders: A Public Health Analysis."

¹⁴² *Ibid.*

¹⁴³ David Kipnis, "Ghosts, Taxonomies, and Social Psychology," *American Psychologist* 52, no. 3 (1997); Norman E. Zinberg, *Drug, Set, and Setting: The Basis for Controlled Intoxicant Use* (New Haven: Yale University Press, 1984); Norman E. Zinberg and K.M. Fraser, "The Role of the Social Setting in the Prevention and Treatment

As we discuss in more detail in later sections, hosts, in this instance, gamblers, have different propensities to adapt to the presence of gambling and its various presentations in their environment. Consequently, gamblers who have experience with mature gambling environments, that is, settings with considerable gambling history experience, are likely to be less responsive to new or expanded gambling circumstances. Alternatively, new or naïve gamblers, hold the potential to be most influenced by shifts in the gambling environment.

At the population level, adaptation to gambling expansion is evident when we consider the epidemiology of gambling disorder¹⁴⁴ in new or mature gambling settings. For example, during the 1970s, the prevalence of gambling disorder in the United States was estimated to be about 0.7 percent.¹⁴⁵ Currently, despite the extraordinary growth of gambling and electronic gambling machines and an apparent increase in the prevalence of gambling-related problems during the 1990s,¹⁴⁶ the lifetime prevalence of gambling disorder in the United States is estimated to be 0.4 percent¹⁴⁷ – surprisingly, about the same. Similarly, the British national gambling surveys reveal that their rate of gambling disorder has slightly decreased – or remained the nearly same – despite expanded gambling and increased electronic gaming machines.¹⁴⁸ This suggests that Western Europe and British populations likely have matured in their relationship with gambling, and exposure changes related to expanded gambling within these jurisdictions did not have lasting impact at the national level.¹⁴⁹ Other jurisdictions or sub-jurisdictions that

of Alcoholism,” in *The Diagnosis & Treatment of Alcoholism*, ed. Jack Mendelson and Nancy Mello (New York: McGraw-Hill Book Company, 1979); Norman E. Zinberg and Howard J. Shaffer, “The Social Psychology of Intoxicant Use: The Interaction of Personality and Social Setting,” in *The Addictions: Multidisciplinary Perspectives and Treatments*, ed. H.B. Milkman and Howard J. Shaffer (Lexington, MA: Lexington Books, 1985).

¹⁴⁴ Gambling disorder is the new terminology describing the mental disorder associated with excessive and repetitive gambling behavior. This term replaces the previous disorder of Pathological Gambling. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders--Text Revision*, Fourth ed. (Washington, D.C.: American Psychiatric Association, 2000); American Psychiatric Association. and American Psychiatric Association. DSM-5 Task Force, *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, 5th ed. (Arlington, VA: American Psychiatric Association, 2013).

¹⁴⁵ M. Kallick et al., “A Survey of American Gambling Attitudes and Behavior,” (Ann Arbor, MI: University of Michigan Press, 1979).

¹⁴⁶ Howard J. Shaffer, M.N. Hall, and J. Vander Bilt, “Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Research Synthesis,” *American Journal of Public Health* 89(1999).

¹⁴⁷ Nancy M. Petry, F.S. Stinson, and B.F. Grant, “Comorbidity of DSM-IV Pathological Gambling and Other Psychiatric Disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions,” *Journal of Clinical Psychiatry* 66, no. 5 (2005).

¹⁴⁸ H. Wardle et al., “British Gambling Prevalence Survey 2007,” *National Centre for Social Research* (2007); Heather Wardle et al., “British Gambling Prevalence Survey 2010,” *ibid.*(2011).

¹⁴⁹ J.W. Welte et al., “Gambling Participation and Pathology in the United States--a Sociodemographic Analysis Using Classification Trees,” *Addictive Behaviors* 29, no. 5 (2004); Howard J. Shaffer and Ryan Martin, “Disordered Gambling: Etiology, Trajectory, and Clinical Considerations,” *Annual Review of Clinical Psychology* 7, no. April (2011).

have different saturation levels might have experienced different impact under similar expansion changes.

Unfortunately, most research focusing on the development and maintenance of gambling-related problems derives from cross-sectional investigative designs. This means that different groups of people were evaluated at different moments in time, leaving scientists unable to determine the specific influences that might have shaped or maintained their gambling patterns over time. Prospective longitudinal research designs – following the same people over time – are necessary to determine with more precision the impact of gambling and gambling expansion on the community and its members.

The few prospective studies completed to date reveal that gambling is a relatively unstable disorder¹⁵⁰ that tends to ebb and flow during both the lifetime as well as within shorter timeframes. This finding is contrary to the often-expressed conventional wisdom that gambling is only a progressive disorder.¹⁵¹ Prospective studies show that both casino and Internet gamblers adapt – tending to reduce their involvement with gambling over time,¹⁵² cross-sectional research has shown similarly that opening casinos is not always associated with increases in gambling disorder.¹⁵³

The purpose of this chapter is to examine and discuss the scientific literature that focuses on the impact of gambling expansion and increased access that can result from such expansion. This chapter first will provide a general discussion of the published literature related to expanded gambling, specifically addressing topics such as temporal effects, geographic effects, objective measurement of exposure, adaptation to availability changes, implications for special

¹⁵⁰ Christian Jacques and Robert Ladouceur, “A Prospective Study of the Impact of Opening a Casino on Gambling Behaviours: 2- and 4-Year Follow-Ups,” *Canadian Journal of Psychiatry* 51, no. 12 (2006); Richard A. LaBrie et al., “Inside the Virtual Casino: A Prospective Longitudinal Study of Actual Internet Casino Gambling,” *European Journal of Public Health* 18, no. 4 (2008); Richard A. LaBrie et al., “Assessing the Playing Field: A Prospective Longitudinal Study of Internet Sports Gambling Behavior,” *Journal of Gambling Studies* 23, no. 3 (2007); Debi A. LaPlante et al., “Sitting at the Virtual Poker Table: A Prospective Epidemiological Study of Actual Internet Poker Gambling Behavior,” *Computers in Human Behavior* 25, no. 3 (2009); Wendy S. Slutske et al., “Personality and Problem Gambling: A Prospective Study of a Birth Cohort of Young Adults,” *Archives of General Psychiatry* 62, no. 7 (2005).

¹⁵¹ Debi A. LaPlante et al., “Stability and Progression of Disordered Gambling: Lessons from Longitudinal Studies,” *Canadian Journal of Psychiatry* 53, no. 1 (2008).

¹⁵² e.g., Christian Jacques and Robert Ladouceur, “A Prospective Study of the Impact of Opening a Casino on Gambling Behaviours: 2- and 4-Year Follow-Ups,” *ibid.* 51, no. 12 (2006); Debi A. LaPlante and Howard J. Shaffer, “Understanding the Influence of Gambling Opportunities: Expanding Exposure Models to Include Adaptation,” *The American Journal of Orthopsychiatry* 77, no. 4 (2007); Ziming Xuan and Howard J. Shaffer, “How Do Gamblers End Gambling: Longitudinal Analysis of Internet Gambling Behaviors Prior to Account Closure Due to Gambling Related Problems,” *Journal of Gambling Studies* 25, no. 2 (2009).

¹⁵³ G. Bondolfi et al., “Prevalence of Pathological Gambling in Switzerland after the Opening of Casinos and the Introduction of New Preventive Legislation,” *Acta psychiatrica Scandinavica* 117(2008); Donald Black, “Prevalence of Problem Gambling in Iowa: Revisiting Shaffer’s Adaptation Hypothesis,” 24, no. 4 (2012).

populations, and crime. We then will present a quantitative analysis of systematically selected gambling expansion literature, weighing both amount of expansion and methodological strength. We will close this chapter with a broad discussion of social costs associated with gambling expansion, including the pros and cons of numeric estimation, as well as providing a range of potential costs, based on the available literature.

Understanding Gambling Expansion Impact across Time, Space, and People¹⁵⁴

As Florida's residents likely will understand, few discussions of gambling generate as much emotional debate as the effect of legalized gambling expansion on public health. Opponents of the expansion of gambling argue that increased opportunities for gambling create a corresponding increase in gambling-related problems, including gambling disorder. Proponents of the expansion of gambling argue that increased opportunities for gambling create jobs and revenue and stimulate the economy. Fortunately, there is evidence available to inform the potential impact of gambling expansion on the public health.

Closely related to gambling expansion is gambling *exposure*. Whereas gambling expansion specifically refers to increases in gambling opportunities, gambling exposure refers to contact with gambling opportunities. A brief discussion of the literature pertaining to gambling exposure is informative for understanding potential gambling expansion impacts in Florida and other jurisdictions.

Research suggests that there is a relationship between exposure to gambling opportunities and gambling-related problems.¹⁵⁵ The relationship is apparent in many different ways. For instance, studies suggest that gaming employees might experience occupational exposure effects. That is, elevated exposure due to contact at work elevates risk for problems. For many years, people have observed that one's occupation, often places individuals at risk for specific hazards. During the 19th century, John Snow argued that if a trade truly causes adverse health consequences, then it should "be extremely so to the workmen engaged in those trades."¹⁵⁶

¹⁵⁴ This review draws upon the ideas and concepts reviewed in Shaffer, H.J., & Martin, R.J. (2011). Disordered gambling: Etiology, trajectory and clinical considerations. *Annual Review of Clinical Psychology*, 7, 483-510. doi: 10.1146/annurev-clinpsy-040510-143928; LaPlante, D.A. & Shaffer, H.J. (2007). Understanding the influence of gambling opportunities: Expanding exposure models to include adaptation. *American Journal of Orthopsychiatry*, 77(4), 616-623; and, Shaffer, H.J., LaBrie, R.A., & LaPlante, D.A. (2004). Laying the foundation for quantifying regional exposure to social phenomena: Considering the case of legalized gambling as a public health toxin. *Psychology of Addictive Behaviors*, 18(1), 40-48.

¹⁵⁵ I.e., exposure effects; for a full review see Debi A. LaPlante and Howard J. Shaffer, "Understanding the Influence of Gambling Opportunities: Expanding Exposure Models to Include Adaptation," *American Journal of Orthopsychiatry* 77, no. 4 (2007).

¹⁵⁶ David E. Lilienfeld, "John Snow: The First Hired Gun?," *American Journal of Epidemiology* 152, no. 1 (2000), p5.

Consistently, in a study of more than 3,000 casino employees from four geographic sites, we found that, relative to the general population, casino employees had a higher rate of severe gambling-related problems.¹⁵⁷ A study of a second sample of casino employees confirmed these findings and, additionally, found higher rates of subclinical gambling-related problems.¹⁵⁸

Research focusing on the geographic exposure to gambling opportunities (e.g., living within a certain distance from gambling opportunities) is fairly consistent. Geographic exposure studies suggest that, when gambling opportunities are nearby, gambling-related problems also are likely to be evident. For example, in the only nationally representative study of college student gambling, we found that that students who attended schools that had two or more legal gambling venues in the same state were more likely to gamble.¹⁵⁹ Legalized gambling also is associated with higher rates of help-seeking. For example, legalized gambling is related to the availability of Gambler's Anonymous chapters,¹⁶⁰ and research from Missouri indicates that rates of self-exclusion from casinos are associated with the location of casinos:¹⁶¹ areas in Missouri that have more casinos have higher rates of self-exclusion among residents. Hence, many studies have demonstrated the proximity to gambling opportunities elevates risk for gambling and gambling problems.

However, there are important methodological concerns associated with these and similar geographic exposure studies that limit their value and potentially their validity. To illustrate, one of the most common ways to study geographic exposure has been to examine variability among the rates of gambling and gambling-related problems with respect to *predetermined* distances from gambling venues. For example, the National Gambling Impact Study Commission found that a casino within 50 miles (vs. 50 to 250 miles) of a person's home is associated with nearly doubled levels of gambling-related problems and gambling disorder.¹⁶² Similarly, a study of Iowa's Gambling Treatment Program helpline callers found that counties within 50 miles of at least one gambling venue received the highest number of gambling crisis calls.¹⁶³ Likewise,

¹⁵⁷ Howard J. Shaffer, J. Vander Bilt, and Matthew N. Hall, "Gambling, Drinking, Smoking and Other Health Risk Activities among Casino Employees," *American Journal of Industrial Medicine* 36, no. 3 (1999).

¹⁵⁸ Howard J. Shaffer and M.N. Hall, "The Natural History of Gambling and Drinking Problems Among Casino Employees," *Journal of Social Psychology* 142, no. 4 (2002).

¹⁵⁹ Richard A. LaBrie et al., "Correlates of College Student Gambling in the United States," *Journal of American College Health* 52, no. 2 (2003).

¹⁶⁰ David Lester, "Access to Gambling Opportunities and Compulsive Gambling," *Substance Use & Misuse* 29, no. 12 (1994).

¹⁶¹ Richard A. LaBrie et al., "Missouri Casino Self-Excluders: Distributions Across Time and Space," *Journal of Gambling Studies* 23, no. 2 (2007).

¹⁶² Dean Gerstein et al., "Gambling Impact and Behavior Study: Report to the National Gambling Impact Study Commission," (Chicago: National Opinion Research Center, 1999).

¹⁶³ Howard J. Shaffer et al., "Evaluating the Iowa Department of Public Health Gambling Treatment Program: Four Years of Evidence," (Boston: Harvard Medical School, Division on Addictions, 2002).

Welte, Wieczorek, Barnes, Tidwell and Hoffman¹⁶⁴ found that, among a range of distances, a 10-mile limit provided the best predictive power for the prototypical exposure effect. That is, more than individuals who lived at greater distances, individuals who reported a casino within 10 miles of their home were more likely to have gambling-related problems. Importantly, these researchers also noted, however, that their models accounted for only a small amount of the total variance. Therefore, a number of unmeasured factors, in addition to geographic proximity, play a role in the development of gambling-related problems.

To start, this body of research fails to include investigative designs that actually can detect causal relationships between proximity and problems. Rather, geographic exposure studies, at most, can illustrate that there is an association between proximity and problems. Geographic studies of exposure also fail to consider infrastructure variations. For example, what effect, if any, does accessibility to venues, number of employees and amount of advertising have on the proximity-problem relationship? Similarly, how do regional vulnerability characteristics change the nature of the relationship between proximity and rates of gambling-related problems? Regions that are more vulnerable might experience exposure differently than regions that are more robust, with respect to public health. Preliminary research confirms that such regional factors could be important. For example, in Missouri, regional vulnerability to risky behavior related to the development of gambling problems, even after controlling for gambling venue proximity.¹⁶⁵

Finally, investigators tend arbitrarily to select the distances (e.g., 50 miles, 10 miles, 100 miles) that they evaluate. This methodological strategy means that any identified effects are specific to those arbitrarily selected distances. What is the size of a particular effect at 49 miles as opposed to 50 miles? Likewise, crude cutoffs, instead of continuous measures, preclude more fine-grained analyses and exclude regions in which virtually no variability in gambling venue exposure is possible (e.g., Nevada). Although geographic exposure studies do show consistency, exposure estimations that are more precise suggest that the relationship is not as straightforward as might be assumed.

1. Measuring Gambling Exposure

Shaffer, LaBrie, and LaPlante¹⁶⁶ argued that, by treating gambling as a social or environmental toxin, they could develop a flexible strategic model that would permit the quantitative measurement of regional exposure to gambling. They suggested that a strategic

¹⁶⁴ J.W. Welte et al., "The Relationship of Ecological and Geographic Factors to Gambling Behavior and Pathology," *Journal of Gambling Studies* 20, no. 4 (2004).

¹⁶⁵ Richard A. LaBrie et al., "Missouri Casino Self-Excluders: Distributions across Time and Space," *ibid.* 23, no. 2 (2007).

¹⁶⁶ Howard J. Shaffer, Richard LaBrie and Debi LaPlante, "Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Considering the Case of Legalized Gambling as a Public Health Toxin," *Psychology of Addictive Behaviors* 18, no. 1 (2004).

Regional Exposure Model (“REM”) could quantify the gambling exposure that exists in a community, county, state or region. The REM yields a standardized multidimensional exposure gradient, the Regional Index of Gambling Exposure (“RIGE”). With a standardized measure, researchers can use the RIGE to test theoretical models empirically, as well as to examine the potential causes and consequences of exposure to social phenomena such as gambling.

The multiple sources that contribute to gambling exposure can be difficult to identify and measure. These sources of exposure likely include, but are not limited to, interpersonal (e.g., peer pressure), societal (e.g., advertising), civic (e.g., venues) and occupational factors (e.g., employment). Research focusing on exposure has shown that some of these factors influence behavior. The basic REM model incorporates three primary exposure components: dose, potency and duration. Components can be added or subtracted to this model. *Dose* is a measure of exposure quantity (e.g., the extent of exposure to a potentially toxic source: lead paint, pesticides, alcohol, casinos). *Potency* is a measure of source strength, amount or threshold (e.g., extent of lead in soil, paint, plumbing, proof of beverage alcohol, type of gambling and settings within which people gamble [charitable, lottery, racetracks, casinos, etc.]). *Duration* is a measure of exposure time (e.g., elapsed years of legal drinking or gambling).

The fundamental equation for determining the regional exposure gradient follows:

$$RE = a + b_1(f)D_1 + b_2(f)P_2 + b_3(f)T_3 + \dots + b_i(f)X_i + \text{error}$$

RE represents regional exposure, where “a” is constant, D is standardized dose, P is standardized potency (i.e., strength of exposure), T is standardized duration (i.e., elapsed exposure) and Xi represents additional standardized environmental public health factors. Error can result from a number of sources, such as regional contiguity. Weights (b) for each component are variable and include the possibility that the component should be transposed (f) because the relationship between increasing exposure and gambling problems might be nonlinear (e.g., quadratic or gradually increasing sine curve).

The RIGE model is important for those interested in identifying the complexities associated with geographic gambling exposure effects. Specifically, that increases in exposure are not necessarily matched proportionately by increases in exposure effects. This means that increasing exposure is not necessarily associated with ever-increasing behavior or problems. Confirming this, using the RIGE strategy, researchers¹⁶⁷ demonstrated that, although Nevada is eight times more exposed to gambling compared to the next most-exposed gambling state, the rate of gambling disorder is not eight times higher in Nevada compared to New Jersey. This pattern suggests that factors other than exposure (e.g., adaptation) are at work influencing the development of gambling and gambling disorders. Considering the role of adaptation as a counterbalance to exposure is a new frontier for gambling-related research and theory.

¹⁶⁷ Ibid.

2. Considering Adaptation to Gambling

The impacts of expanded gambling on populations are likely to be diverse; however, the scope and duration of gambling impact for specific areas is difficult to estimate. This difficulty exists because of limitations on the available scientific literature in this area. Prospective longitudinal studies (i.e., studies that follow groups of individuals over long periods of time), ultimately, are important to determine the impact of expanded gambling on the general population. Unfortunately, few longitudinal studies focusing on the effects of gambling expansion are available. Moreover, the outcomes of available studies are somewhat mixed.

Grun and McKeigue¹⁶⁸ found in Great Britain, for example, an increase in subclinical levels, but not clinical levels of gambling-related problems following the implementation of a national lottery. Furthermore, the impact was not uniform within the affected area. In addition to studies like this one that yield mixed outcomes, available studies that examine gambling and gambling-related problems before and after gambling expansion tend to have many methodological limitations (e.g., poor follow-up rates and limited generalizability). Such designs preclude a final determination about whether gambling expansion (a) creates problems, (b) attracts people who already have problems, (c) develops in areas where people already have problems, or (d) is correlated with other factors, such as urban development and isolation, which might be the true source of problems.

With longitudinal studies, it is easier to discern patterns and changes over time that are not possible to observe in single time point or even pre-post studies. The few available multi-time point studies indicate that such repeated observations are essential to the development of an accurate description of gambling impact. As described previously, Shaffer, LaBrie and LaPlante raised the idea that the presence of gambling could be a social toxin and act similarly to other environmental toxins that affect individuals and communities.¹⁶⁹ They argued that certain social events, such as gambling and advertising could be the social equivalents of germs. Consistently, McGuire's¹⁷⁰ social inoculation theory suggests that exposure to social phenomena, like exposure to toxins, can stimulate a shift in attitudes and behavior; in turn, these changes can influence many things, including health. Individuals' "social immunity," or resistance to the social phenomena that they have developed over time through exposure to the toxin, determines the strength of such shifts. It follows that small amounts of exposure can stimulate the development of resistance (i.e., inoculation), but large amounts of toxic exposure can overwhelm

¹⁶⁸ "Prevalence of Excessive Gambling before and after Introduction of a National Lottery in the United Kingdom: Another Example of the Single Distribution Theory," *Addiction* 95, no. 6 (2000).

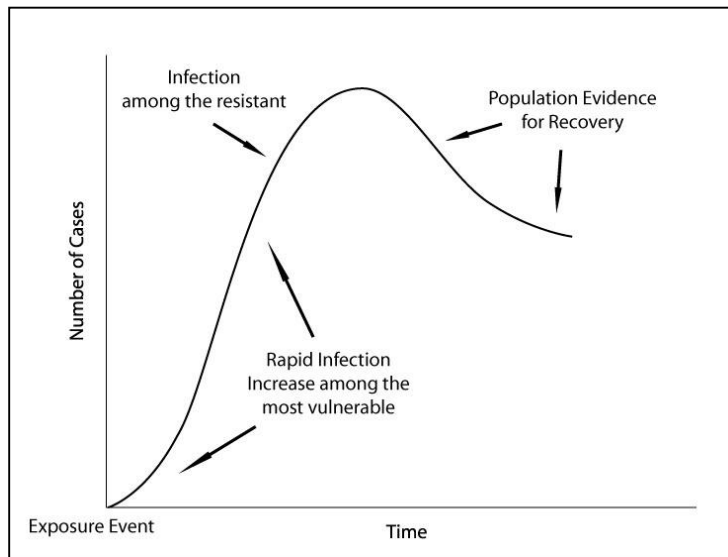
¹⁶⁹ "Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Considering the Case of Legalized Gambling as a Public Health Toxin."

¹⁷⁰ William J. McGuire, "Inducing Resistance to Persuasion," in *Advances in Experimental Social Psychology*, ed. Leonard Berkowitz (New York: Academic Press, 1964).

resistance and lead to adverse consequences. According to this theory, more exposure translates into a greater likelihood of infection for an increasingly larger segment of the population.

Exposure to gambling is essential to the development of gambling-related problems. However, as illustrated above, the links between gambling exposure, gambling expansion and gambling-related problems are not as straightforward as many people assume. One reason for such findings might be adaptation. Recall that rates of problems among long-term residents of Nevada are not eight times greater than the next most-exposed jurisdiction (New Jersey); this likely is because Nevada residents have adapted to the proximity of casinos and other gambling opportunities in a way that makes additional opportunities a less powerful influence on their behavior than might be otherwise. Although public health research informs us that adaptation is a primary component of the prototypical natural history of infection,¹⁷¹ few gambling researchers have explored this possibility.

Figure 100: Prototypical epidemic curve



Source: LaPlante & Schaffer

In brief, Figure 100 adapted from LaPlante & Shaffer,¹⁷² illustrates the course of a prototypical population infection. It suggests that exposure to new toxins (e.g., viruses, lead paint) produces problems, like disease. As exposure to toxins occurs, the most vulnerable people in the population become infected. However, as the most vulnerable members of the population succumb to the toxin and remaining people become more resilient, the number of new cases

¹⁷¹ Center for Disease Control and Prevention, "Constructing an Epidemic Curve," http://www.cdc.gov/descd/MiniModules/Epidemic_Curve/page09.htm; Leon Gordis, *Epidemiology*, 2nd ed. (Philadelphia: W.B. Saunders Company, 2000).

¹⁷² LaPlante and Shaffer, "Understanding the Influence of Gambling Opportunities: Expanding Exposure Models to Include Adaptation."

reaches a peak. After this peak, people and society adapt, and the original problem tends to more closely approximate pre-exposure levels.

For gambling, this might mean exposure to new gambling opportunities (e.g., gambling expansion) can lead to more gambling and more gambling-related problems, especially among those who are most vulnerable. However, when populations already have accumulated some resiliency (e.g., Nevada's saturated market), the impact of gambling expansion (i.e., new exposure events) weakens. As with disease, gambling expansion effects vary by location, historical moment and population, among other things. Consequently, discussions about the impact of gambling and gambling expansion on population segments must consider the experience of the population segment with gambling, the vulnerability of the population segment to a range of gambling-related disorders, and the history of the population with respect to adaptation to gambling-related activities (e.g., wagering, advertising, etc.).

3. Pre- and Post-Gambling Expansion Examples

There is increasing evidence that the phenomenological processes associated with exposure to new gambling opportunities are similar to those associated with exposure to new toxins. For example, a 2002 Nevada study found that recent residents of Nevada had more current gambling-related problems than long-term residents did.¹⁷³ Similarly, Shaffer and colleagues¹⁷⁴ found that newer employees had more past year gambling-related problems than more experienced employees (i.e., employed for more than four years) did.

Similarly, a longitudinal study of self-exclusion from casinos in Missouri revealed that self-exclusion enrollment rates have changed over time in a way that is consistent with public health exposure and adaptation modeling.¹⁷⁵ Likewise, one longitudinal study conducted in Canada showed that gambling-related problems did not escalate linearly following the addition of a new casino in the region.¹⁷⁶ Rather, rates of problems increased in the short run but later returned to pre-casino levels. Finally, in some of our own work involving Internet gambling, we observed among more than 40,000 people that new subscribers to an Internet gambling service also followed a similar pattern marked by initial increases in activity and later evidence of adaptation.¹⁷⁷

¹⁷³ Rachel A. Volberg, "Gambling and Problem Gambling in Nevada: Report to the Nevada Department of Human Resources," (Northampton, MA: Gemini Research Ltd., 2002).

¹⁷⁴ "Gambling, Drinking, Smoking and Other Health Risk Activities among Casino Employees."

¹⁷⁵ Richard A. LaBrie et al., "Missouri Casino Self-Excluders: Distributions across Time and Space," *Journal of Gambling Studies* 23, no. 2 (2007).

¹⁷⁶ Jacques and Ladouceur, "A Prospective Study of the Impact of Opening a Casino on Gambling Behaviours: 2- and 4-Year Follow-Ups."

¹⁷⁷ Debi A. LaPlante et al., "Population Trends in Internet Sports Gambling," *Computers in Human Behavior* 24, no. 5 (2008).

Taken altogether, these findings suggest that exposure effects are not as straightforward as many people assume. Instead, exposure effects vary depending on many different characteristics (e.g., people, places, period and more). Although early views of exposure might have suggested a simple linear association between gambling exposure and gambling problems (i.e., increased exposure increases problems commensurately), this other methodologically advanced work suggests that the effects of exposure vary across people, time and space. Most specifically, exposure effects seem to be of limited duration. In the following brief discussion, we highlight some of the most recently published peer-reviewed studies that have examined exposure and adaptation effects related to gambling expansion. In a later section of this chapter, we provide a systematic review and analysis of some of these and similar studies.

- *Iowa*. New research from Iowa¹⁷⁸ – recognizing that most exposure studies ignore temporal changes – tested Shaffer’s adaptation hypothesis using a telephone survey of community members. There had been a presumption that the expansion of gambling in Iowa between 1989 and 1995 led to increases in a variety of problems related to gambling. However, as the adaptation hypothesis predicted, by comparing the 1989 and 1995 samples to a current sample, Black et al. revealed that despite continuing increases in the expansion of gambling opportunities (i.e., casinos) the newly observed low rates support the adaptation hypothesis and “... suggest that the prevalence of disordered gambling in Iowa has not increased and may have even decreased since 1995, despite increased gambling opportunities” (p. 281).
- *Missouri*. In a statewide study of gamblers, researchers examined the temporal and geographic distribution of gamblers who elected to self-exclude themselves from casino gambling from 1996 to 2004.¹⁷⁹ LaBrie et al. plotted the location of Missouri casinos across the state and identified epicenters of gambling-related problems. Using the RIGE, these researchers demonstrated the geographic gradient associated with gambling disorders. The temporal analysis was most interesting, however, because it showed that the annual number of self-exclusion enrollments increased initially after the opening of casinos and then leveled off during later years – as the adaptation hypothesis predicts.
- *Canada*. Canadian researchers prospectively examined the impact of new casino gambling on the community.¹⁸⁰ Their first study of gambling impact

¹⁷⁸ Black, “Prevalence of Problem Gambling in Iowa: Revisiting Shaffer’s Adaptation Hypothesis.”

¹⁷⁹ LaBrie et al., “Missouri Casino Self-Excluders: Distributions across Time and Space.”

¹⁸⁰ Jacques and Ladouceur, “A Prospective Study of the Impact of Opening a Casino on Gambling Behaviours: 2- and 4-Year Follow-Ups; Christian Jacques, Robert Ladouceur and Francine Ferland, “Impact of Availability on Gambling: A Longitudinal Study,” *ibid.*45, no. 9 (2000).

examined the introduction of new casino gambling activities and its impact on randomly selected nearby residents.¹⁸¹ Using a comparison sample, and an experimental community (i.e., the community within which a new casino opened), the researchers compared the two groups of participants before and after the opening of the casino. The experimental group exposed to the new casino showed a significant increase in gambling on casino games, the maximum amount of money lost in one day of gambling, reluctance toward the opening of a local casino, and the number of participants who reported knowing a person who has developed a gambling problem during the last 12 months.

Their second study, which represents the first prospective study with an experimental and comparison group, clarified these findings.¹⁸² Despite finding that, at one year after the opening of the casino, an increase in playing casino games and in the maximum amount of money lost in one day's gambling, this trend was not maintained over time. As the adaptation hypothesis predicted, for the group exposed to a new casino, the rate of at-risk and probable pathological gamblers did not increase at the two- and four-year follow-ups. The residents' reluctance to open a local casino was generally stable over time following the casino's opening. As a result, the authors concluded that these findings raise different explanatory factors and provide support for the Regional Exposure Model as a useful measure of studying the expansion of gambling and the adaptation hypothesis.

- *Switzerland.* Using a community sample and telephone surveys, Bondolfi et al.¹⁸³ demonstrated that the rate of past-year problem and disordered gambling remained steady (i.e., 0.8 percent for problem and 0.5 percent for disordered) between 1998 and 2005 “despite the massive opening of casinos in Switzerland since 2002” (p. 238). As with Iowa, these researchers supported the adaptation hypothesis and suggested that various factors (e.g., social measures, legal obligations and social adaptation capacities) might account for the stabilization of prevalence estimates.

¹⁸¹ “Impact of Availability on Gambling: A Longitudinal Study.”

¹⁸² Christian Jacques and Robert Ladouceur, “A Prospective Study of the Impact of Opening a Casino on Gambling Behaviours: 2- and 4-Year Follow-Ups,” *ibid.* 51, no. 12 (2006).

¹⁸³ Bondolfi et al., “Prevalence of Pathological Gambling in Switzerland after the Opening of Casinos and the Introduction of New Preventive Legislation.”

- *Australia and New Zealand.* Storer, Abbott and Stubbs conducted a research synthesis¹⁸⁴ of 34 epidemiologic studies of problem gambling conducted in Australia and New Zealand since 1991. They examined the greater availability of electronic gaming machines (“EGMs”) and any associated increases in problem gambling prevalence and related harms. In addition, they examined whether individuals and populations adapt to exposure over time (i.e., whether prevalence rates plateau or decline), even in the face of increasing gambling availability. Although these authors consider these two competing hypotheses, this study effectively examines the adaptation hypothesis, which suggests both an increase in gambling-related problems as a novelty effect, followed by a plateau or reduction in these problems.¹⁸⁵ They observed statistically meaningful relationships for an increase in prevalence with increasing per capita density of EGMs, consistent with the exposure hypothesis. However, they also report that they failed to observe evidence that prevalence leveled off with increasing density of EGMs. They did observe a decrease in the prevalence of gambling disorder over time when they controlled for the availability EGMs. This finding is partially consistent with adaptation. The authors conclude that it is likely that both forces are at work simultaneously. However, adaptation always remains a function of timeframe, suggesting that the relationship between EGM, gambling disorders and a host of other community, player and game characteristics can influence the prevalence of gambling-related problems.
- *Sweden.* Abbott, Romild and Volberg¹⁸⁶ used data from the Swedish Longitudinal Gambling Study (Swelogs). This data reflects an eight-year research program, financed and conducted by the Swedish National Institute of Public Health. The major goal of the study is to identify risk and protective factors for problem gambling and develop methods and strategies to prevent problem gambling and other gambling-related harms. After comparing data from 1997-1998 to 2008-2009, the authors observed that – despite using a sample with “... higher numbers of younger people and those with higher risk for gambling problems ...” and expanded gambling exposure – “...the proportion of the Swedish population that gambled in the past year reduced

¹⁸⁴ J. Storer, M. Abbott, and J. Stubbs, “Access or Adaptation? A Meta-Analysis of Surveys of Problem Gambling Prevalence in Australia and New Zealand with Respect to Concentration of Electronic Gaming Machines,” *International Gambling Studies* 9, no. 3 (2009).

¹⁸⁵ LaPlante and Shaffer, “Understanding the Influence of Gambling Opportunities: Expanding Exposure Models to Include Adaptation.”

¹⁸⁶ Max W. Abbott, Ulla Romild and Rachel A. Volberg, “Gambling and Problem Gambling in Sweden: Changes between 1998 and 2009,” *Journal of Gambling Studies* (2013).

significantly.” The researchers observed this finding both for the past year and the past 30-day timeframes across a variety of gambling types, and across all demographic groups in the population (e.g., age groups, gender). “The finding in the present study, of significant reductions in gambling participation, is consistent with findings from research in a number of other jurisdictions including New Zealand and Australia. These results are consistent with the adaptation hypothesis, namely that despite increased availability and marketing, gambling participation (and problems) can decrease as novelty wears off and people become more aware of the harm and social costs associated with gambling.”¹⁸⁷ Finally, although there was an increased rate of lifetime gambling disorder, the prevalence of past-12-month gambling disorder remained stable across the timeframe comparison.¹⁸⁸

4. Population Segments

It is important to note that gambling expansion is likely to affect different groups of people in different ways. There is evidence that the risks associated with gambling disorder vary across population segments.¹⁸⁹ In this section, we briefly review research related to some of the most well-studied population segments that might experience gambling expansion differently from those in the general population.

a. Youth

Historically, research has shown that young people are at greater risk for developing gambling-related problems compared with their adult counterparts.¹⁹⁰ However, new research is casting this risk in a different light. In a rare longitudinal study of gambling-related behaviors, Winters et al. observed that the prevalence of adolescents with gambling disorders in Minnesota

¹⁸⁷ Ibid.

¹⁸⁸ Past year disorder rates are more meaningful than lifetime rates because these are more accurate and can vary up and down. When accurate, lifetime rates only increase across the lifespan.

¹⁸⁹ Howard J. Shaffer and Matthew N. Hall, “Updating and Refining Meta-Analytic Prevalence Estimates of Disordered Gambling Behaviour in the United States and Canada,” *Canadian Journal of Public Health* 92, no. 3 (2001); Shaffer, Hall and Vander Bilt, “Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Research Synthesis; J.W. Welte et al., “Gambling and Problem Gambling across the Lifespan,” *Journal of Gambling Studies* 27, no. 1 (2011); J.W. Welte et al., “The Prevalence of Problem Gambling Among U.S. Adolescents and Young Adults: Results from a National Survey,” *ibid.*(2008); J.W. Welte et al., “Gambling Participation in the U.S.--Results from a National Survey,” *ibid.*18, no. 4 (2002); J.W. Welte et al., “Risk Factors for Pathological Gambling,” *Addictive Behaviors* 29, no. 2 (2004).

¹⁹⁰ Shaffer, Hall and Vander Bilt, “Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Research Synthesis; Shaffer and Hall, “Updating and Refining Meta-Analytic Prevalence Estimates of Disordered Gambling Behaviour in the United States and Canada; Nancy M. Petry, *Pathological Gambling: Etiology, Comorbidity, and Treatment*, 1st ed. (Washington, DC: American Psychological Association, 2005).

did not increase despite a shift away from informal games toward more legalized games.¹⁹¹ Similarly, Wallisch observed that the rate of gambling remained steady and the prevalence of gambling disorders actually diminished among adolescents in Texas between 1992 and 1995.¹⁹² Shaffer and Korn¹⁹³ noted that meta-analytic research showed that the rate of disordered gambling had increased during the last three decades of the 20th century, but only among adults from the general population. Consistent with the few local studies that had monitored young people's gambling behavior, the rate of disorder was not increasing among youth or patients with psychiatric or substance use disorders.¹⁹⁴

As we noted earlier, as gambling expanded throughout the United States and more people started to gamble, the rate of gambling disorders among adults from the general population has remained steady¹⁹⁵ – despite their increased gambling activity. For adults, legalized gambling provided an increasingly acceptable opportunity to try a new activity; for young people, however, gambling remains illicit regardless of expansion. Because of their disconnect from public policy pressures, for psychiatric patients, prisoners or underage gamblers, the social sanctions and proscriptions are less influential than for adults from the general population. As gambling expands, therefore, adults from the general populace are the population segment likely to be most responsive to these changes. Consequently, we might expect that the healthy adult segment of the population is going to reflect the most visible effects from expanded gambling opportunities.

b. Elderly

Although stakeholders have tended to consider younger people as at higher risk for gambling-related problems compared with their adult counterparts, there is increasing attention toward older adults and their increased risks or benefits from gambling. As gambling expanded and older adults sought more varied recreational activities, gambling junkets became more common choices for mixing travel and gambling. Furthermore, the industry and those associated with the industry (e.g., travel agents) increasingly promoted these junkets. Investigators reported that older adults gambled to relax, pass time, get away for the day, avoid boredom and take

¹⁹¹ Ken C. Winters, Randy D. Stinchfield and Leigh G. Kim, "Monitoring Adolescent Gambling in Minnesota," *Journal of Gambling Studies* 11, no. 2 (1995).

¹⁹² L.S. Wallisch, "Gambling in Texas: 1992 Texas Survey of Adolescent Gambling Behavior," (Austin: Texas Commission on Alcohol and Drug Abuse, 1993); "Gambling in Texas: 1992 Texas Survey of Adult and Adolescent Gambling Behavior," (Austin: Texas Commission on Alcohol and Drug Abuse, 1996).

¹⁹³ "Gambling and Related Mental Disorders: A Public Health Analysis."

¹⁹⁴ Shaffer, Hall and Vander Bilt, "Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Research Synthesis."

¹⁹⁵ Shaffer and Martin, "Disordered Gambling: Etiology, Trajectory, and Clinical Considerations."

advantage of inexpensive meals.¹⁹⁶ The elderly participate in gambling at about the same rate as do other adults.¹⁹⁷ They tend to exhibit gambling disorders at about the same rate as their adult counterparts, but a lower rate than their youth counterparts.¹⁹⁸ Gambling disorder was consistently associated with poorer health among older adults, as it was with their younger counterparts. Interestingly, recreational gambling also was associated with poorer health measures among those 40-64 years of age; however, among adults older than 64 years, recreational gambling, in addition to obesity, was associated with better physical and mental functioning.¹⁹⁹ Other cross-sectional and prospective research has shown that the elderly experience some cognitive, health and social benefits associated with gambling and leaving the house to gamble.²⁰⁰

Disease. There is increasing evidence that among those who suffer with movement disorders (e.g., Parkinson’s Disease (“PD”) or Restless Leg Syndrome), often the older segment of the population, and who receive dopamine agonists (“DA” treatment) for these disorders, might be at higher risk for excessive gambling – as well as a variety of impulse-related – disorders. Because Florida is home to an older and aging segment of the US population, we want to explore this issue in detail.

There is growing evidence suggesting an association between PD and gambling disorder.²⁰¹ In general, there is about a 13.6 percent rate of Impulse Control Disorder (“ICD”)

¹⁹⁶ D.P. McNeilly and W.J. Burke, “Late Life Gambling: The Attitudes and Behaviors of Older Adults,” *Journal of Gambling Studies* 16, no. 4 (2000).

¹⁹⁷ Welte et al., “Gambling Participation and Pathology in the United States--a Sociodemographic Analysis Using Classification Trees.”

¹⁹⁸ Dave Clarke, “Older Adults’ Gambling Motivation and Problem Gambling: A Comparative Study,” *Journal of gambling studies / co-sponsored by the National Council on Problem Gambling and Institute for the Study of Gambling and Commercial Gaming* 24, no. 2 (2008).

¹⁹⁹ Rani A Desai, M Mayur, and Marc N Potenza, “Gambling, Health and Age: Data from the National Epidemiologic Survey on Alcohol and Related Conditions,” *Psychology of Addictive Behaviors* 21, no. 4 (2007).

²⁰⁰ Rani A. Desai et al., “Health Correlates of Recreational Gambling in Older Adults.,” *American Journal of Psychiatry* 161, no. 9 (2004); Joni Vander Bilt et al., “Gambling Participation and Social Support Among Older Adults: A Longitudinal Community Study,” *Journal of Gambling Studies* 20, no. 4 (2004).

²⁰¹ J.A. Molina et al., “Pathological Gambling in Parkinson’s Disease: A Behavioral Manifestation of Pharmacologic Treatment,” *Movement Disorders* 15, no. 5 (2000); M. Leann Dodd et al., “Pathological Gambling Caused by Drugs Used to Treat Parkinson Disease,” *Archives of Neurology* 62, no. 9 (2005); R. Zand, “Is Dopamine Agonist Therapy Associated with Developing Pathological Gambling in Parkinson’s Disease Patients?,” *European Neurology* 59, no. 3-4 (2008); Atbin Djamshidian et al., “Pathological Gambling in Parkinson’s Disease--a Review of the Literature,” *Movement Disorders* 26, no. 11 (2011); Valerie Voon et al., “Mechanisms Underlying Dopamine-Mediated Reward Bias in Compulsive Behaviors,” *Neuron* 65, no. 1 (2010); Valerie Voon et al., “Frequency of Impulse Control Behaviours Associated with Dopaminergic Therapy in Restless Legs Syndrome,” *BMC Neurology* 11(2011); Valerie Voon et al., “Impulse Control Disorders in Parkinson Disease: A Multicenter Case--Control Study,” *Annals of Neurology* 69, no. 6 (2011); Valerie Voon et al., “Dopamine Agonists and Risk: Impulse Control Disorders in Parkinson’s Disease,” *Brain* 134, no. Pt 5 (2011); *ibid.*

among PD patients.²⁰² However, the research about PD and ICDs is sometimes inconsistent. For example, there is some evidence that PD itself might be “protective” by its association in some studies with less risky behavior. For example, there are reports of PD being associated with lower rates of novelty seeking, smoking and alcohol use compared with the general population, before the appearance of motor symptoms.²⁰³ Alternatively, there is evidence that PD patients, regardless of DA treatment status, evidence more discounting of future rewards compared to healthy controls, suggesting that PD patients engage in more risky choices than their healthy counterparts.²⁰⁴

Some researchers have explained the association between PD and ICDs by dopamine agonist treatment. One hypothesis suggests that DA treatments might increase a tendency to make risky decisions by limiting risk evaluation in the central nervous system.²⁰⁵ However, there is some evidence that PD, in the absence of DA treatment, might itself be associated with elevated rates of compulsive medication use and other compulsive behaviors. For example, compulsive behaviors associated with PD (e.g., punding) or cognitive changes associated with PD might exacerbate or encourage excessive gambling²⁰⁶ independent of DA treatment (e.g., depression, obsessive-compulsive disorder, anxiety, impulsivity, novelty-seeking).

If DA treatment caused impulse control disorders (“ICD”) such as gambling disorder, we might expect to find a relationship between dosage and ICDs. For example, we might observe that higher DA dosages are associated with more severe, more intense or multiple ICDs and lower dosages associated with more mild, less intense and fewer ICDs. To date, there is little evidence to inform us about this relationship. For example, “published reports have been able to neither demonstrate the extent of risk for gambling-related problems nor study the correlation of dosage with this potential adverse effect among Parkinson’s disease patients treated with dopaminergic medications.”²⁰⁷

Unfortunately, most work on DA treatment and ICDs has been cross-sectional and absent the randomized experimental research designs necessary to establish causation. Consequently, although there is some evidence of an association between DA treatment and ICDs, this body of research has not demonstrated a causal relationship between DA treatment and the development

²⁰² “Dopamine Agonists and Risk: Impulse Control Disorders in Parkinson’s Disease.”

²⁰³ Valerie Voon et al., “Chronic Dopaminergic Stimulation in Parkinson’s Disease: From Dyskinesias to Impulse Control Disorders,” *The Lancet Neurology* 8, no. 12 (2009).

²⁰⁴ Maria Milenkova et al., “Intertemporal Choice in Parkinson’s Disease,” *Movement Disorders* 26, no. 11 (2011).

²⁰⁵ Voon et al., “Dopamine Agonists and Risk: Impulse Control Disorders in Parkinson’s Disease.”

²⁰⁶ Voon et al., “Impulse Control Disorders in Parkinson Disease: A Multicenter Case--Control Study.”

²⁰⁷ Zand, “Is Dopamine Agonist Therapy Associated with Developing Pathological Gambling in Parkinson’s Disease Patients?,” 183.

of ICDs such as problem gambling. Some studies have reported that patients with ICDs have received DA treatment more and at a higher dosage than those without such disorders; this association, however, does not indicate whether the treatment is a result of the ICD or vice versa. In addition, some research shows that being female, developing a dopamine-associated disorder (e.g., Restless Leg Syndrome) at a younger age, receiving DA treatment, and having a family history of disordered gambling are associated with the presence of ICDs.²⁰⁸ Voon, Schoerling, et al. concluded “None of the RLS patients identified with impulse control behaviors in this study attributed their ICB symptoms to dopaminergic treatment” (p. 5). Similarly, others have concluded that an adverse effect of DA treatment is associated with susceptible users,²⁰⁹ and that there are many interactive factors associated with the emergence of pathological gambling (“PG”) and other ICDs.²¹⁰ Perhaps the association among the variety of risk factors and ICDs such as PG is best summed up by the following conclusion from a case control study:

These findings suggest that multiple psychiatric and personality features contribute similarly to a range of ICDs in PD. However, dyskinesia was not associated with single ICDs but with multiple ICDs. Dyskinesia has been associated with punning behaviors and compulsive medication use, suggesting potential overlapping mechanisms across a range of excessive repetitive motoric behaviors perhaps linked to dopaminergic modulation.²¹¹

In a recent study of Finnish patients with PD, investigators examined the prevalence of ICDs and depression.²¹² These investigators estimated that 7 percent of the PD evidenced PG. Importantly, Joutsa et al. reported that depressive symptoms were statistically the most important factor in explaining the variance associated with Impulse Control Disorder risk, explaining more of the variance than even sex, age, age of disease onset, alcohol use or medication. Also important, these investigators failed to identify an association between DA treatment and ICDs.²¹³

The prevalence of ICDs among those with PD is interesting and important. The prevalence of ICDs, in general, is about 14 percent, and people with PD evidence about a 3.9

²⁰⁸ Voon et al., “Frequency of Impulse Control Behaviours Associated with Dopaminergic Therapy in Restless Legs Syndrome.”

²⁰⁹ Voon et al., “Mechanisms Underlying Dopamine-Mediated Reward Bias in Compulsive Behaviors; Voon et al., “Dopamine Agonists and Risk: Impulse Control Disorders in Parkinson’s Disease.”

²¹⁰ Voon et al., “Impulse Control Disorders in Parkinson Disease: A Multicenter Case--Control Study.”

²¹¹ *Ibid.*, p. 994.

²¹² Juho Joutsa et al., “Impulse Control Disorders and Depression in Finnish Patients with Parkinson’s Disease,” *Parkinsonism and Related Disorders* 18, no. 2 (2012).

²¹³ *Ibid.*

percent prevalence of having two or more concurrent ICDs. Delaney et al.²¹⁴ conclude, "...while the evidence that ICDs in people with PD result from a purely biological process is significant, biological processes cannot easily explain some aspects of the occurrence of these behaviours. Indeed, it remains unclear why some people taking DAs develop ICDs, but the majority do not" (p. 339). "Furthermore, ICDs have been shown to occur in other chronic medical conditions in the absence of explicit dopaminergic involvement, including heart disease and arthritis ..., dementia ... and multiple sclerosis. Additionally, Tourette's syndrome, which is considered to be a hyperdopaminergic disorder ... is not linked to reports of ICDs. Therefore, the relationship between ICDs and dopamine dysregulation is not as clear as some have suggested" (p. 340). It is likely that psychosocial factors explain a meaningful part of the relationship between PD and the development and maintenance of ICDs such as PG.

c. Comorbidity

Comorbidity is common among people with gambling disorders.²¹⁵ Versions of the Diagnostic and Statistical Manual of Mental Disorders ("DSM") that have included gambling disorder as a distinct disorder also have observed that other disorders may coexist with gambling disorder. For example, DSM-IV notes that pathological gamblers "may be prone to developing general medical conditions that are associated with stress... Increased rates of Mood Disorders, Attention-Deficit Hyperactivity Disorder, Substance Abuse or Dependence, and Antisocial, Narcissistic, and Borderline Personality Disorders have been reported in individuals with Pathological Gambling."²¹⁶ DSM-V provides similar and continuing support for the importance of understanding the role of comorbidity when evaluating gambling disorders.²¹⁷

Clinicians often report that patients who seek treatment for gambling disorder have a variety of social problems caused by gambling. However, treatment seekers are very different from people who have gambling problems but do not seek treatment.²¹⁸ Treatment seekers typically have a greater variety and intensity of psychological problems compared with their counterparts who do not seek treatment. In a recent national study, there were no gambling

²¹⁴ Mary Delaney et al., "Impulse Control Disorders in Parkinson's Disease: A Psychosocial Perspective," *Journal of Clinical Psychology in Medical Settings* 19, no. 3 (2012).

²¹⁵ Andrew Boudreau, Richard LaBrie and Howard J. Shaffer, "Towards DSM-V: "Shadow Syndrome" Symptom Patterns among Pathological Gamblers," *Addiction Research & Theory* 17, no. 4 (2009); Ronald C. Kessler et al., "DSM-IV Pathological Gambling in the National Comorbidity Survey Replication," *Psychological Medicine* 38(2008).

²¹⁶ American Psychiatric Association, *DSM-IV: Diagnostic and Statistical Manual of Mental Disorders*, Fourth ed. (Washington, D.C.: American Psychiatric Association, 1994), 616.

²¹⁷ American Psychiatric Association. DSM-5 Task Force, *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*.

²¹⁸ J. Berkson, "Limitations of the Application of Fourfold Table Analysis to Hospital Data," *Biometrics* 2(1946).

treatment seekers identified among the participants, however, about half of those who were identified as having a gambling disorder reported receiving treatment for other mental health problems.²¹⁹

Evidence is unequivocal for the relationship between substance use and gambling disorders. Among those with gambling disorder, there are increased rates of substance use disorders, whether the psychoactive substance is beverage alcohol, nicotine or illicit drugs.²²⁰ In a longitudinal study of college students, researchers identified that participants who played cards, casino/slots and involved in extensive gambling groups evidenced higher scores on alcohol/drug use, novelty seeking and self-identified gambling problems compared to those who investigators classified into a low-gambling group.²²¹

Individuals with concurrent psychiatric and psychological problems also display much higher rates of gambling disorder. There are increased rates of mood disorders, attention-deficit/hyperactivity disorder, other impulse-control disorders and antisocial, narcissistic and borderline personality disorders among pathological gamblers.²²²

Recent studies have reported that gambling disorder is significantly associated with other pre-existing mental disorders. In fact, in a scientific community sample, psychiatric comorbidity predated gambling disorder for 74.3 percent and followed gambling disorder for about 23.5 percent of the comorbid cases.²²³ This research reveals that other mental disorders typically predate the onset of co-occurring gambling disorder and predict the subsequent onset and persistence of gambling disorder. Similar age of onset results have been observed for cocaine and alcohol-related disorders.²²⁴

²¹⁹ Kessler et al., "DSM-IV Pathological Gambling in the National Comorbidity Survey Replication."

²²⁰ Renee M. Cunningham-Williams et al., "Problem Gambling and Comorbid Psychiatric and Substance Use Disorders among Drug Users Recruited from Drug Treatment and Community Settings," *Journal of Gambling Studies* 16, no. 4 (2000); Kessler et al., "DSM-IV Pathological Gambling in the National Comorbidity Survey Replication."

²²¹ Anna E Goudriaan et al., "Longitudinal Patterns of Gambling Activities and Associated Risk Factors in College Students," *Addiction* 104, no. 7 (2009).

²²² Jon E. Grant and Marc N. Potenza, *Pathological Gambling: A Clinical Guide to Treatment*, 1st ed. (Washington, DC: American Psychiatric Publishing, Inc., 2004); Kessler et al., "DSM-IV Pathological Gambling in the National Comorbidity Survey Replication; Petry, *Pathological Gambling: Etiology, Comorbidity, and Treatment*.

²²³ Kessler et al., "DSM-IV Pathological Gambling in the National Comorbidity Survey Replication."

²²⁴ C.B. Nelson, A.C. Heath, and R.C. Kessler, "Temporal Progression of Alcohol Dependence Symptoms in the U.S. Household Population: Results from the National Comorbidity Survey," *Journal of Consulting & Clinical Psychology* 66, no. 3 (1998); Howard J. Shaffer and Gabriel B. Eber, "Temporal Progression of Cocaine Dependence Symptoms in the National Comorbidity Survey," *Addiction* 97(2002).

d. Gaming Employees

Casino employees represent a unique and conceptually important segment of the Florida population, with full access and exposure to gambling compared to the general public. Casino employees have higher levels of gambling, smoking, drinking and mood disorder compared to the general population.²²⁵ In addition, gambling problems, like the abuses of alcohol, tobacco, opiates and cocaine, are more dynamic than conventional wisdom suggests. People frequently move toward more healthy or more disordered states during their involvement with gambling.²²⁶ Further, concurrent psychiatric and alcohol or other substance use problems are likely to influence transitions to more disordered states and impede changes to less disordered states. For example, the first multiyear prospective study of casino employees indicated that people troubled with gambling, drinking or both shifted these behavior patterns regularly; in addition, these changes tended toward reduced levels of disorder rather than the increasingly serious problems often suggested by a traditional view of addictive behavior patterns.²²⁷ However, this study did not examine the pathways to recovery for casino employees. If gambling disorders are similar to other addictions, there is a vital gap in the literature because most people with gambling-related problems probably escape this circumstance without treatment.²²⁸ Prospective research designs are necessary to establish the extent of natural recovery and the determinants that influence the transition from problem to non-problem gambling or abstinence.

Crime Rates²²⁹

One of the most common concerns with the introduction or expansion of casinos is crime. Many observers raise the crime issue as one of the major negative impacts of casinos that may offset the potential economic benefits from the introduction of casinos. The impact of gambling and gambling disorder on crime and economics is a complex matter. This complexity emerges

²²⁵ Shaffer and Hall, "The Natural History of Gambling and Drinking Problems among Casino Employees; Shaffer, Vander Bilt and Hall, "Gambling, Drinking, Smoking and Other Health Risk Activities among Casino Employees."

²²⁶ Howard J. Shaffer et al., "Toward a Syndrome Model of Addiction: Multiple Expressions, Common Etiology," *Harvard Review of Psychiatry* 12, no. 6 (2004).

²²⁷ Shaffer and Hall, "The Natural History of Gambling and Drinking Problems among Casino Employees."

²²⁸ Wendy S. Slutske, "Natural Recovery and Treatment-Seeking in Pathological Gambling: Results of Two U.S. National Surveys," *American Journal of Psychiatry* 163, no. 2 (2006); Wendy S. Slutske, Kristina M. Jackson, and Kenneth J. Sher, "The Natural History of Problem Gambling from Age 18 to 29," *Journal of Abnormal Psychology* 112, no. 2 (2003); Wendy S. Slutske et al., "Pathological Gambling Recovery in the Absence of Abstinence," *Addiction (Abingdon, England)* 105(2010).

²²⁹ The review is drawn from Douglas Walker, "Casinos and Crime: A Review of the Literature," chapter 16 in *Casinomics: The Socioeconomic Impacts of the Casino Industry* (New York: Springer, 2013); and Douglas Walker, "Casinos and Crime in the USA," in Bruce Benson and Paul Zimmerman, eds., *Handbook on the Economics of Crime* (Northampton, MA: Edward Elgar, 2010), p. 488-517.

because crime and economics are influenced by many dynamic interactive factors that ebb and flow at a variety of levels (e.g., community, region, nation).

Fortunately, the relationship between casinos and crime is actually one of the issues on which there is a good history of academic research (for this young field), for a variety of US jurisdictions. In this section, we review some of the academic literature that addresses the relationship between casinos and crime in the United States. The review begins with theoretical treatments of the casino-crime link, followed by a discussion of selected papers and key issues.

Most of the published studies on casinos and crime utilize data from the FBI's *Uniform Crime Reports* ("UCR"). The Index I crimes examined include aggravated assault, rape, robbery, murder, larceny, burglary and auto theft. Obviously crimes such as robbery, larceny and burglary are more likely to be linked to casinos than are rape and murder (and studies confirm this). Different analyses test for a statistical difference in the amount of crime or the crime rate before and after the introduction of casinos in a particular jurisdiction. Most of the crime studies have examined cities or counties.

1. Theories of Crime

There are several "common sense" reasons one might expect there to be a link between casinos and crime. Crime may increase with the introduction of a casino in a city simply because casinos attract a large number of patrons. This means there are more potential criminals and more potential victims in the area. Then it would hardly be surprising if more criminal activity occurred after the opening of a casino. Alternatively, it might be that casino patrons – as a group – are more likely to commit crimes than non-casino patrons. Another possibility is that since some casino patrons carry large amounts of cash, existing criminals in an area may be incited to engage in more crime than they might otherwise.

In their 2006 paper on casinos and crime,²³⁰ Grinols and Mustard offer two explanations for why casinos might reduce crime, and five explanations for why crime might rise because of casinos being introduced (p. 31-32). We paraphrase their explanations:

Casinos reduce crime:

- Wage effects: If casinos have a positive impact on wages, then the motivation for committing crimes may be reduced.
- Development: If casinos bring economic development, more residents, safer streets, etc., then there may be less crime.

Casinos increase crime:

²³⁰ Earl L. Grinols and David B. Mustard, "Casinos, Crime, and Community Costs," *Review of Economics and Statistics*, Volume 88, 2006, p. 28-45.

- Development: Casinos could have a negative development effect, attracting “unsavory clients” and draining the local economy.
- Increased payoff to crime: Casinos attract patrons with money, increasing potential victims and potential gains from engaging in crime.
- Problem gambling and gambling disorder: The spread of casinos makes it likely that there would be an increase in problem gambling and, hence, the potential for increased crime among this population.
- Visitor criminality: Casinos may attract visitors who are more prone to commit and be victims of crime.
- Casino-induced changes in population composition: Casino expansion may increase the proportion of unskilled workers, who may be more apt to engage in criminal activity.

One can imagine a variety of other explanations for why there may be a link between casinos and crime. However, there are three major theories of crime from the academic literature that perhaps most concisely explain why there may be a casino-crime link. We briefly explain each of these.

One theory that focuses on the individual criminal is the economic theory of crime.²³¹ This theory views the individual criminal as a rational actor, who engages in crime after a cost-benefit analysis. In particular, they consider the expected benefit of engaging in crime, and offset that with the expected costs. A crime is committed only if the expected benefits to the would-be criminal outweigh the expected costs. These costs include the penalty of being caught adjusted by the probability of being caught. According to this theory, one might expect a link between casinos and crime because at a casino, there are many individuals who carry large amounts of cash. This represents a large benefit for a would-be thief. On the cost side, however, there may be a high probability of being caught, as casino security is generally very keen.

A second theory of crime is the “routine activities theory.”²³² This theory suggests that criminal activity increases when three conditions occur simultaneously: presence of likely offenders, presence of suitable targets, and a lack of enforcement against crime. A new casino development may be seen as providing optimal conditions for an explosion in crime, as a casino may draw criminals and victims to the same place, with a less-than-proportionate increase in law

²³¹ The “economics of crime” field was pioneered by Gary Becker. See Gary S. Becker, “Crime and Punishment: An Economic Approach,” *Journal of Political Economy*, Volume 76, 1968, p. 169-217.

²³² Lawrence E. Cohen and Marcus Felson, “Social Change and Crime Rate Trends: A Routine Activity Approach,” *American Sociological Review*, volume 44, 1979, p. 588-608.

enforcement. However, one must consider that the security measures at casinos are generally very effective.²³³

The third relevant concept is the “hot spot theory” of crime.²³⁴ This is closely related to the routine activities theory. It holds that a majority of crimes occur in very few/small geographic areas – that criminal activity is concentrated in “hot spots.” If a casino is introduced in a city and there is a casino-crime link, then a casino may act as a hot spot for crime.

Next, we briefly discuss the published studies that analyze the relationship between casinos and crime in the United States. Using information from Walker’s (2013) review,²³⁵ we provide basic results from the different studies, and then we discuss several key casino-crime studies in more detail.

2. Review of Empirical Evidence

The literature that tests for a link between casinos and crime rates comes from the criminology, tourism and more recently, the economics fields. Despite coming from different disciplines, the literature has more in common than one might initially expect. We can summarize what all of these studies do, as a group. As noted above, most crime studies examine the FBI’s *Uniform Crime Reports* (UCR) data. The studies attempt to determine whether the introduction or expansion of casino gambling is related to an increase (or decrease) in reported crimes. The studies typically control for a variety of demographic variables, such as population, average income, race, education, unemployment and age. They sometimes control for other factors, such as the experiences in neighboring jurisdictions and changes to relevant laws.

Perhaps the two key differences among the different casino-crime studies from the literature are: (1) the different jurisdictions and time periods analyzed, and (2) the empirical methodology used. Obviously, as casinos have spread across the United States, researchers have been interested to see whether the relationship of casinos to crime is jurisdiction-specific or more of a general relationship. Researchers tend to use different methodologies because they come from different disciplines and, obviously, because different data are used in different studies, which may require different empirical strategies.

In his review of the literature, Walker divides studies into two categories: “early” (1985-2000) and “recent” (2001-2010). We reproduce Walker’s summary tables here. The key result from each study is summarized in the column headed “Casinos Increase Crime Rate?”

²³³ This raises the issue of whether crimes are committed on the casino premises or off. The issue is addressed in some detail in Daniel Curran and Frank Scarpitti, “Crime in Atlantic City: Do Casinos Make a Difference?” *Deviant Behavior*, Volume 12, p. 431-449.

²³⁴ Lawrence W. Sherman, Patrick R. Gartin and Michael E. Buerger, “Hot Spots of Predatory Crime: Routine Activities and the Criminology of Place,” *Criminology*, Volume 27, 1989, p. 27-55.

²³⁵ Douglas Walker, *Casinomics: The Socioeconomic Impacts of the Casino Industry* (New York: Springer, 2013), chapter 16.

Figure 101: Casino-crime rate studies, 1985-2000

<u>Study Author(s)</u>	<u>State/Region Studied</u>	<u>Years Analyzed</u>	<u>Year Casinos Opened</u>	<u>Casinos Increase Crime Rate?</u>	<u>Population Adjusted for Visitors?</u>
Albanese ²³⁶	Atlantic City	1978-82	1978	No	Yes
Friedman et al. ²³⁷	Atlantic City	1972-84	1978	Yes	No
Hakim and Buck ²³⁸	Atlantic City	1972-84	1978	Yes	No
Curran and Scarpitti ²³⁹	Atlantic City	1985-89	1978	No	Yes
Giacopassi and Stitt ²⁴⁰	Biloxi, MS	1991-93	1992	Yes	No
Chang ²⁴¹	Biloxi, MS	1986-94	1992	No	Yes
Stokowski ²⁴²	Colorado	1989-94	1991	No	Yes
General Accounting Office ²⁴³	Atlantic City	1977-97	1978	No	Yes

Source: Douglas Walker, *Casinonomics*.

As the table above shows, the earlier studies often focused on Atlantic City. Other studied jurisdictions generally included a limited amount of data. Walker (2013) argues, “Some of these [early] studies are methodologically or empirically weak.”²⁴⁴ It appears from the early studies listed above that there are no consistent findings; some studies found that casinos increase the crime rate, while others do not.

The more recent analyses are, as a group, better quality, using more and better data, which helps to facilitate higher-quality empirical analysis. Yet, as with the earlier studies, the newer study results are mixed. The more recent studies examined some different jurisdictions, including one county-level study for all US counties (Grinols and Mustard, 2006). Interestingly, in a test of the hot spot theory of crime for Reno, NV, Barthe and Stitt (2007) found that the areas immediately around casinos were actually safer than areas farther away.

²³⁶ Jay Albanese, “The Effect of Casino Gambling on Crime,” *Federal Probation*, Volume 48, 1985, p. 39-44.

²³⁷ Joseph Friedman, Simon Hakim and J. Weinblatt, “Casino Gambling as a ‘Growth Pole’ Strategy and its Effect on Crime,” *Journal of Regional Science*, Volume 29, 1989, p. 615-623.

²³⁸ Simon Hakim and Andrew J. Buck, “Do Casinos Enhance Crime?” *Journal of Criminal Justice*, Volume 17, 1989, p. 409-416.

²³⁹ Daniel Curran and Frank Scarpitti, “Crime in Atlantic City: Do Casinos Make a Difference?” *Deviant Behavior*, Volume 12, p. 431-449.

²⁴⁰ David Giacopassi and B. Grant Stitt, “Assessing the Impact of Casino Gambling on Crime in Mississippi,” *American Journal of Criminal Justice*, Volume 18, 1993, p. 117-131.

²⁴¹ Semoon Chang, “The Impact of Casinos on Crime: The Case of Biloxi, Mississippi,” *Journal of Criminal Justice*, Volume 24, 1996, p. 431-436.

²⁴² Patricia Stokowski, “Crime Patterns and Gaming Development in Rural Colorado,” *Journal of Travel Research*, Volume 34, 1996, p. 63-69.

²⁴³ General Accounting Office, “Impact of Gambling: Economic Effects More Measurable Than Social Effects.” Available at <http://www.gao.gov/products/GGD-00-78>.

²⁴⁴ *Ibid*, p. 209.

Figure 102: Casino-crime rate studies, 2001-2010

<u>Study Author(s)</u>	<u>State/Region Studied</u>	<u>Years Analyzed</u>	<u>Year Casinos Opened</u>	<u>Casinos Increase Crime Rate?</u>	<u>Population Adjusted for Visitors?</u>
Gazel et al. ²⁴⁵	Wisconsin (Tribal)	1981-94	(various)	Yes	No
Wilson ²⁴⁶	Indiana	1992-97	1995	No	No
Evans and Topoleski ²⁴⁷	National (Tribal only)	1985-1989	(various)	Yes	No
Stitt et al. ²⁴⁸	Various	1980s-90s	(various)	Mixed	Yes
Betsinger ²⁴⁹	144 counties in 33 states	1977-2001	(various)	Mixed	No
Grinols and Mustard ²⁵⁰	National	1977-1996	(various)	Yes	No
Barthe and Stitt ²⁵¹	Reno, NV	2003	1937	No	Yes
Reece ²⁵²	Indiana	1994-2004	1995	No	Yes

Source: Douglas Walker, *Casinonomics*.

The bottom line from the studies listed above is that there is no firm link between casinos and crime. However, it turns out that there is one key variable on which casino-crime study results seem to hinge. How the “crime rate” is defined appears to be critical to the results in 15 of the 18 studies listed above. We explore this issue in detail next.

3. ‘Crime Rate’ Definition

“Crime rate” refers to the number of crimes per capita that are committed or reported in a jurisdiction during a particular period, usually a year. Crime rates usually are expressed as the number of crimes per 100,000 people. A crime rate provides a metric either for how safe (or unsafe) a particular area is or, alternatively, how likely a particular person is to be victimized by

²⁴⁵ Ricardo C. Gazel, Dan Rickman and William N. Thompson, “Casino Gambling and Crime: A Panel Study of Wisconsin Counties,” *Managerial and Decision Economics*, Volume 22, 2001, p. 65-75.

²⁴⁶ Jerry M. Wilson, “Riverboat Gambling and Crime in Indiana: An Empirical Investigation,” *Crime & Delinquency*, Volume 47, 2001, p. 610-640.

²⁴⁷ William N. Evans and Julie H. Topoleski, “The Social and Economic Impact of Native American Casinos,” *NBER Working Paper Series* (Cambridge, MA: National Bureau of Economic Research).

²⁴⁸ B. Grant Stitt, Mark W. Nichols, and David Giacomassi, “Does the Presence of Casinos Increase Crime? An Examination of Casino and Control Communities,” *Crime & Delinquency*, Volume 49, 2003, p. 253-284.

²⁴⁹ Sara Betsinger, “The Relationship Between Gambling and County-Level Crime,” M.A. Thesis, 2005 (College Park, MD: University of Maryland).

²⁵⁰ Earl L. Grinols and David B. Mustard, “Casinos, Crime, and Community Costs,” *Review of Economics and Statistics*, Volume 88, 2006, p. 28-45.

²⁵¹ Emmanuel Barthe and B. Grant Stitt, “Casinos as ‘Hot Spots’ and the Generation of Crime,” *Journal of Crime & Justice*, Volume 30, 2007, p. 115-140. “Impact of Casinos on Criminogenic Patterns,” *Police Practice and Research*, Volume 10, 2009, p. 255-269. “Temporal Distributions of Crime and Disorder in Casino and Non-Casino Zones,” *Journal of Gambling Studies*, Volume 25, 2009, p. 139-152.

²⁵² William S. Reece, “Casinos, Hotels, and Crime.” *Contemporary Economic Policy*, Volume 28, 2010, p. 145-161.

crime. Crime rates can be compared across jurisdictions and through time to evaluate different crime-prevention policies, changes in police enforcement, etc. – or the effect of casinos on crime.

If we let C represent crimes committed and P represent the population at risk, then the crime rate can be represented as: $Crime\ Rate = C/P$. The more crimes committed within a given population, obviously the less safe that area is, and the more likely a person in that area is to be victimized by crime. Relatively few casinos in the United States are located in urban settings, although this is certainly changing. When we consider that, often, casinos are located in jurisdictions with relatively small populations, along with the fact that casinos can generate an enormous amount of tourism, it becomes clear that if we wish a crime rate to represent what it is supposed to – the likelihood of being victimized by crime – then we must re-evaluate the denominator of the crime rate (i.e., the population at risk).

If we consider a large city with casinos, such as Detroit, we may not expect the casinos to attract a large number of tourists relative to the resident population. Then the crime rate noted above may be appropriate (C/P), since C would represent all the crimes committed in the city, while P would represent the population at risk, or those people living in Detroit. If we ignore the tourists who do visit Detroit, it probably would not markedly affect the crime rate, assuming the number of tourists is relatively small compared to the resident population.

However, if we consider a casino jurisdiction that has a relatively small population, such as a rural county or town, but whose casino attracts a large number of tourists each year, then using C/P as described above will overestimate the crime rate – perhaps dramatically.

Now consider a small county with only 10,000 residents and no tourism to speak of. Assume that 100 crimes are committed each year. Then the crime rate would be $100/10,000$, or 1 percent. This indicates that a county resident has a 1 percent chance of being victimized by a crime in any given year.

Now, suppose a casino is built in the county that attracts 1 million tourists per year, who each stay in the county for an average of one day. Since these tourists are within the county and would seem to be equally likely as county residents to be crime victims in the county, the “population at risk” increases with the tourism. If we divide 1 million tourists by 365 days, we get an average of 2,739 tourists each day. Then the population at risk for the county would be the 10,000 residents plus the 2,739 tourists per day, or 12,739. Certainly, the number of crimes committed within the county would be expected to increase, simply because there are so many people coming through the county. We might expect, for example, the number of crimes committed to increase by 27 percent, the same proportion as the increase in population at risk ($2,739/10,000$); however, visitors to the county may be more likely to engage in crime since it is not their home. Or, as some observers have argued, perhaps casino patrons are more likely to engage in criminal activity than others. In any case, the number of crimes is likely to increase. If we assume it is a 27 percent increase in crimes, then we would now see 127 crimes committed in the casino county.

Many casino-crime studies use a crime rate that includes the increase in crimes committed, but do not adjust the population at risk. In other words, they would calculate the crime rate at 127/10,000, or 1.27 percent. However, this rate will drastically over-estimate the risk of being victimized by crime. The appropriate crime rate would include not only the additional crimes committed by tourists but also would adjust the population at risk by the visitors. Making both adjustments would yield a crime rate of only 127/12,739, or 1 percent – the same as before the casino was introduced. Thus, the failure to adjust the population at risk by the tourists to the county, in our example, causes an overstatement of the crime rate by 27 percent.

Rates that do not adjust for visitor population create inaccurate assessments for many casino communities, but also for tourism centers in general. For example, Orlando is often listed as one of the most dangerous communities when looked at solely by its crime rate. The web site Neighborhood Scout lists Orlando as no. 67 on its list of 100 most dangerous cities, ahead of such urban centers as Chicago and Elizabeth, NJ.²⁵³ Two years ago, *US News & World Report* ranked Orlando as the third most dangerous city, tied with Birmingham, Alabama.²⁵⁴ In our research, few of the analyses that list such rankings note the disparity between tourist centers and residential centers.

Now revisiting the two tables above that listed the various casino-crime studies, consider the right-most column (“Population Adjusted for Visitors”). This column indicates whether the crime rate used in the study includes the visiting population in the population at risk (i.e., the denominator of the crime rate). When comparing this column to the column to the left (whether the study finds “Casinos Increase Crime Rate”), we note that 15 of the 18 studies reviewed are Yes/No or No/Yes combinations. That is, if a study finds that casinos increase crime, that study did not adjust the population at risk by visitors (or tourists) to the jurisdiction – a Yes/No combination. Or if a study yields a No/Yes combination, it means that the study did not find a casino-crime link, and the study did adjust the population measure of the crime rate by the visitors to the jurisdiction. The fact that the large majority of crime studies’ results seem to hinge on this issue suggests that how the crime rate is defined is absolutely critical.

Based on the studies reviewed above, the only reasonable conclusion seems to be that there is no strong evidence that casinos inevitably lead to an increase in crime. But there is no strong evidence that they reduce crime either. The safest conclusion is probably that the effect of casinos on crime is case-specific.

Next, we provide a more detailed review of several key studies, as well as information from a study published more recently than Walker’s (2013) comprehensive review.

²⁵³ <http://www.neighborhoodscout.com/neighborhoods/crime-rates/top100dangerous/> (accessed September 28, 2013)

²⁵⁴ By Danielle Kurtzleben, “11 Most Dangerous Cities,” *US News & World Report*, February 16, 2011 <http://www.usnews.com/news/articles/2011/02/16/the-11-most-dangerous-cities>

4. Detailed Reviews

One of the best casino-crime studies to date is a 2003 study that paired six new casino jurisdictions to six control communities.²⁵⁵ The analysis compares the crime rates in casino communities with their control communities. They analyze both resident population and population at risk. As noted in the table above, their results were mixed; they found that in casino communities, rates for certain crimes increased, while others decreased. More to the point, in some casino communities, more types of crimes decreased than increased, relative to their control communities, while in other casino communities, more types of crime increased than decreased. The main point from this study may be that the effect of casinos on crime is likely to be different for different jurisdictions.

The 2006 study by Grinols and Mustard²⁵⁶ is probably the most comprehensive study on casinos and crime to date. This study examined crime at the county-level in the United States from 1977 through 1996. The authors tested how the presence of a casino in a county affected crime rates. Their data set on county-level casinos is one that allows for a more comprehensive study than any other analysis that has been published. The authors found that roughly 8 percent of crime in casino counties is attributable to casinos. Unfortunately, it is almost certain that their results overstate the crime impact of casinos because the authors did not adjust the population at risk for county visitors.²⁵⁷ Grinols and Mustard had little choice, however, as county-level visitor data are generally not available. Another serious problem with the analysis is that the authors cannot distinguish between crime generated as a result of tourism, in general, and casino-related tourism.

The 2010 study by Reece²⁵⁸ looked at the casino-crime question in Indiana. It represents a significant improvement over the Grinols and Mustard study because it controls for several factors that Grinols and Mustard were unable to control. First, Reece was able to control for the number of visitors to the casinos in Indiana through turnstile counts. Second, Reece was able to control for tourism, in general, because his model included the number of hotel rooms in each county. Third, Reece included a variable to control for law enforcement. These three controls represent a significant improvement over other papers in the literature, and particularly over the Grinols and Mustard paper. Reece's analysis suggests that new casinos increase burglaries, but

²⁵⁵ B. Grant Stitt, Mark W. Nichols and David Giacompassi, "Does the Presence of Casinos Increase Crime? An Examination of Casino and Control Communities," *Crime & Delinquency*, Volume 49, 2003, p. 253-284.

²⁵⁶ Earl L. Grinols and David B. Mustard, "Casinos, Crime, and Community Costs," *Review of Economics and Statistics*, Volume 88, 2006, p. 28-45.

²⁵⁷ For a detailed analysis of this, and other problems with the Grinols and Mustard study, see Douglas Walker, "Evaluating Crime Attributable to Casinos in the U.S.: A Close Look at Grinols and Mustard's 'Casinos, Crime, and Community Costs'." *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 23-52.

²⁵⁸ William S. Reece, "Casinos, Hotels, and Crime." *Contemporary Economic Policy*, Volume 28, 2010, p. 145-161.

reduce car thefts and aggravated assaults. Increases in casino turnstile counts are associated with lower rates of larceny, car theft, aggravated assault and robbery.²⁵⁹ Overall, Reece's results suggest that casinos do not generate higher crime rates. But, as other studies have found, Reece concludes that some crimes may increase, but overall the amount of crime falls.

Finally, the relatively new paper by Park and Stokowski²⁶⁰ is likely the first in the literature to successfully isolate casino-based tourism from other types of tourism, with respect to tourism's impact on crime. These authors tested the impact of different types of tourism attractions on county-level crime rates. The types of tourism tested were: casinos, snow skiing, "natural resource access counties" and cultural tourist attractions. The authors examined crime rates in 24 Colorado counties. Each county had only one type of major tourist attraction. The analysis controlled for average daily traffic volume, number of employees in police services, and growth level (measured by population, per capita income, local government revenue, retail sales).²⁶¹ Interestingly, Park and Stokowski found that "gaming counties did not show significant differences in crime rates compared to other types of tourism communities."²⁶² This finding raises questions about other studies that have linked casinos and crime, as no previous study has fully isolated casino-specific tourism from tourism. However, there is (at least) one important caveat to keep in mind. Casinos in Colorado are relatively small, and the crime results found for them may not reflect casinos in other jurisdictions or their relationships to crime in those jurisdictions.

5. Overview of Crime Literature

As is clear from the sample of papers discussed in this section, there have been numerous studies of the relationship between casinos and crime over the past several decades. A significant number of these studies were during the 1980s and focused on Atlantic City. However, as casinos spread throughout the United States, the question became more interesting to politicians and voters, and researchers increased their attention to the casino-crime question.

The evidence appears to be split: About half of research papers suggest that casinos exacerbate crime, on net, whereas the other half finds no statistically significant impact. However, as we emphasize, this finding appears to depend on how the crime rate is defined. Those studies that calculate the crime rate using only the jurisdiction's resident population tend to find that casinos increase crime rates. Yet, those that use the "population at risk" (i.e., resident plus tourist population) in calculating the crime rate tend not to find a significant relationship between casinos and crime. Because the purpose of crime rates is to indicate the likelihood of

²⁵⁹ Reece, p. 157.

²⁶⁰ Minkyung Park and Patricia A. Stokowski, "Casino Gaming and Crime: Comparisons Among Gaming Counties and Other Tourism Places," *Journal of Travel Research*, 2011, p. 289-302.

²⁶¹ *Ibid*, p. 292.

²⁶² *Ibid*, p. 299.

being victimized by crime, we regard the use of the population at risk as being more appropriate, especially in measuring crime rates in jurisdictions with a significant amount of tourism.

Lastly, there is only one study of which we are aware that attempts to isolate casino-specific tourism from other forms of tourism when testing for a link to crime.²⁶³ That study found that casino-tourism was no more likely than the other forms of tourism tested to cause crime.

As we have noted in prior Spectrum reports, former New Jersey Governor Brendan Byrne – who was in office when New Jersey became the first state outside Nevada to offer legal casino gambling – has been asked often whether crime increased in Atlantic City since casino gambling began in 1978. Byrne said: Of course crime increased. Before casinos, there was nothing in Atlantic City to steal.²⁶⁴

US Supreme Court Justice Stephen G. Breyer wrote a dissenting opinion in a 2008 court decision overturning a District of Columbia ban on handguns. In that opinion, Breyer noted the risks in assuming causal relationships. The increase in crime in the district since the imposition of strict gun control laws in 1978 might lead one to conclude that the ban fueled the increase in crime. In Breyer's opinion, he wrote, “As students of elementary logic know, ‘after it’ does not mean ‘because of it.’”²⁶⁵

In the context of understanding the potential impact of casinos, our longstanding position is that the wisdom of both Byrne and Breyer should be heeded. Complex issues often defy efforts to impose simple cause-and-effect relationships.

In conclusion, although many researchers have studied the issue, there is no consensus. More to the point, there is insufficient evidence to have confidence either that there is no relationship between casinos and crime, or that there *is* a relationship. The most appropriate conclusion would seem to be that any link between casinos and crime is probably market/jurisdiction-specific.

Indeed, that conclusion is borne out in work that Spectrum has performed over the past decades, including an in-depth 2009 study on the impacts of gaming on the state of Connecticut. That report concluded that, while Connecticut experienced the development of two tribal destination resorts, local communities were often left unprepared for the impacts, which were made worse by policies in that state that effectively reduced the role of regional governments. Our report noted the following:

²⁶³ Minkyung Park and Patricia A. Stokowski, “Casino Gaming and Crime: Comparisons Among Gaming Counties and Other Tourism Places,” *Journal of Travel Research*, 2011, p. 289-302.

²⁶⁴ Byrne, a popular speaker known for his wit, has used that example many times in our presence, most recently at a dinner in Atlantic City held on November 28, 2007.

²⁶⁵ Adam Liptak, “Gun Laws and Crime: A Complex Relationship,” *New York Times*, June 29, 2008 <http://www.nytimes.com/2008/06/29/weekinreview/29liptak.html?pagewanted=all&r=0>

Norwich, the largest municipality in the region, is coping with a number of problems. It is located within eight miles of both casinos. DUI arrests have more than doubled since 1992. Montville and Ledyard have also experienced significant increases. Roughly 20 percent of the motorists in Montville, Ledyard and North Stonington arrested for DUI acknowledged to police that their last drink was at a casino. One such motorist was charged with manslaughter in March 2009 for allegedly causing a fatal accident by driving the wrong way on I-395.

Norwich ... officials estimate casino-related costs to be anywhere from \$1 million to \$2.5 million a year. They include:

- A 27 percent increase in motor vehicle accidents from 1991 to 2004.
- An increase in police overtime from \$85,000 in 1991 to more than \$280,000 in 2008.
- A 76 percent increase in calls for service from people needing the assistance of the police from 1992 to 2004.

State and federal law enforcement officials made 43 embezzlement arrests in 1992, the year the first Indian casino opened. In 2007, the most recent year that statistics are available, the number increased to 214. No other state that reported 40 or more embezzlements in 1992 has had a higher percentage increase than Connecticut. The percentage increase in Connecticut from 1992 to 2007 is nearly 400 percent; nationwide the increase was 38 percent.²⁶⁶

The key lesson from our Connecticut study was that proper planning at multiple levels of government, as well as a better allocation of resources, could have made a critical difference in the nature of such demands on public services, and in the ability of government to respond.

Dimensional Assessment of the Gambling Expansion Literature

[See Appendix I for our quantitative analysis of selected peer-reviewed and gray literature assessed for methodological quality, extent of gambling expansion, and extent of social impact.]

Florida is considering several gambling expansion scenarios. Unfortunately, the scientific and scholarly literature does not map cleanly onto the Florida scenarios under consideration. An evidence-based evaluation of each scenario with respect to the literature is not possible. This means that any specific discussion of these scenarios and the probable social impact of one expansion scenario versus another will rest upon assumptions and suppositions that derive from

²⁶⁶ "Gambling in Connecticut: Analyzing the Economic and Social Impacts," Spectrum Gaming Group, June 22, 2009, p. 13-14

outside the scientific literature. Rather than offering an opinion on these matters, we will restrict our analysis to an evidence-based discussion that addresses gambling expansion options.

To begin our perspective on gambling expansion and its potential impact on Florida and Floridians, it is important to keep in mind that the scientific literature that provides the evidence for understanding gambling expansion and its potential effects is limited by middling methodology and mixed results. Consequently, although the research reveals that expansion seems to have little impact on the extent of gambling-related problems, the methodological weakness inherent in this body of work precludes a confident conclusion that gambling expansion has little or no impact on gambling-related problems. Furthermore, there is no current evidence to suggest that expansion complexity, as measured by types of gambling, numbers of venues and introductory exposure, is related to clinical level social impact changes. As noted in the general introduction to this chapter, it is important to remember that jurisdictions like Florida that already have considerable exposure to legalized gambling and gambling opportunities are less likely to be impacted by additional gambling compared to settings that are newly exposed to gambling, and perhaps ambling naïve.

To gain precision regarding the social impact and costs of any expanded gambling that occurs, it will be necessary for Florida to complete prospective longitudinal data collection. Absent prospective longitudinal research designs, it is difficult at best to determine the impact of expanded gambling in Florida or anywhere else. The following discussion describes the importance of developing and implementing a prospective longitudinal design to study the impact of expanded gambling.

As our team members described in a recent editorial²⁶⁷, in the case of measuring the impact of expanded gambling, both the often-used, repeated cross-sectional design and the much-needed prospective intensive cohort study would provide important information. However, both of these designs are quasi-experimental. Consequently, both of these designs are vulnerable to a variety of challenges to internal and external validity (e.g., history, selection, maturation, interaction of testing and exposure)²⁶⁸. Both quasi-experimental designs offer investigators an opportunity to interpret differences in variables across time and space from the naturally occurring “intervention” of expanded gambling. In both cases – repeated cross-sectional and prospective cohort – the environment is not well-controlled; historical events or contextual changes unrelated to gambling changes might influence the variables of interest.

The primary difference between the repeated cross-sectional and prospective cohort design is that one measures differences across individuals and the other measures change within

²⁶⁷ Howard J. Shaffer et al., “Can Massachusetts Evaluate the Impact of Its Gambling Expansion?,” Op-Ed, *The Brief Addiction Science Information Source (BASIS)* no. June 10 (2013), <http://www.basionline.org/opededitorials/>.

²⁶⁸ Donald T. Campbell and Julian C. Stanley, *Experimental and Quasi-Experimental Designs for Research* (Chicago: Rand McNally & Company, 1963).

individuals. With a repeated cross-sectional design, investigators can produce prevalence estimates at multiple time points. From differences between and among those estimates, researchers can then attempt to infer whether and how the intervening event, namely gambling expansion, might be associated with the observed differences across the estimates. Unfortunately, inter-sample differences obscure any possible conclusions. With a prospective cohort design, the same basic approach is used, but in addition to repeated prevalence rates, we can observe within-individual change. It is vital to examine the same people who have been exposed to gambling and gambling expansion over long periods. Through this research design we can have more confidence that we can identify the long-term effects of gambling and the course of these effects. Thus, prospective longitudinal studies achieve four primary objectives that a cross-sectional design cannot:

1. Reduce noise and measurement error – each data point is compared to another from the same individual, so other variables that differ from individual to individual are controlled.
2. Allow for estimates of incidence (e.g., the new development of gambling problems), remission (e.g., the improvement of existing gambling problems), recurrence (e.g., the re-emergence of earlier gambling problems), and mechanisms of change (e.g., increases in casino venue gambling leading to increased problems) – cross-sectional designs must rely on retrospective data to attempt to reconstruct this information.
3. With suitable sample retention, eliminate the possibility that there are fundamental sample differences that account for distinctions across time points – with cross-sectional designs, because the individuals differ from time point to time point, it is possible that the samples differ in ways that affect their responses to the variables in question.
4. Because it follows the same people over time, allowing for the identification of variables that precede and predict changes in other variables among the cohort, prospective longitudinal designs permit investigators to detect *impact*. The problems with using cross-sectional research designs to make causal or temporal claims are well-known in the research community.

Successful projects using prospective cohort designs (e.g., the Framingham Heart Study and the Nurses' Health Study) greatly increase our understanding of the mechanisms and order of change, impacts on health, and potential causal links between variables.

Social Cost Estimation: Economic Challenges and Illustrations

Political and academic debate over the merits and potential harms associated with legal casino gambling has occurred mostly since the early 1990s, as casinos began to first spread outside of Nevada and New Jersey, and were adopted in a variety of states in the Midwest. Throughout the years since, perhaps the key argument against the expansion of casinos has been

that they may generate sizable “social costs” that offset the economic benefits attributable to casinos. Even now, social costs are raised as the major argument against casinos. Indeed, the anti-casino organization *No Casinos Florida* lists on its website a variety of studies that examine the social costs of casinos. Such studies often provide grim predictions about what would happen with the expansion of casino gambling. Yet, as states and local communities continue to show interest in casinos, one wonders about the dismal predicted social impacts of casino gambling. In the next section, we introduce different items typically included in social cost estimates. We later turn to definitional and measurement issues in social cost studies.

1. Introduction to ‘Social Costs’

To many people, the term “social cost” raises thoughts of social ills, such as crime, divorce, or suicide attributable to excessive gambling. Indeed, a “social cost” literature began to develop during the mid-1990s, which examined these negative impacts of gambling. One of the key problems in the academic literature on social costs, however, is that researchers who have endeavored to identify and/or develop monetary measures of the social costs of gambling have usually not started with a definition of what they are trying to measure. This was a fundamental problem in the literature, which began to garner scholarly and scientific attention during 1999. Even since 1999, however, this area of research has not advanced in any substantive way. The criticism leveled by the National Research Council in 1999 is just as valid today:

Unfortunately, the state of research into the benefits and costs of gambling generally, and into the costs of pathological gambling specifically, is not sufficiently advanced to allow definitive conclusions to be drawn. Few reliable economic impact analyses or benefit-cost analyses have been done ...²⁶⁹

One thing generally accepted by all researchers is that whatever social costs are attributable to gambling are the result of problem and pathological gamblers. These are individuals who gamble to an extent that it negatively impacts their professional, personal or financial life.

A list follows of items typically included in social cost studies. We briefly define each of these items.

- Income lost from missed work: Gamblers might skip work to gamble. This is a measure of the value of income the gamblers loses from lost work hours.
- Decreased productivity on the job: Problem gamblers are believed to be less productive on the job, perhaps because they are distracted by thoughts about gambling. This causes them to be less productive on the job.

²⁶⁹ National Research Council, *Pathological Gambling: A Critical Review* (Washington, DC: National Academy Press, 1999), p. 157-158. Available at http://www.nap.edu/catalog.php?record_id=6329.

- Depression and physical illness related to stress: Psychologists note that problem gamblers often suffer from depression. The stress associated with problem gambling (e.g., financial problems) also may lead to physical illness.
- Increased suicide attempts: People with serious gambling problems may find themselves unable to stop gambling, or they may have mounting bills that they cannot pay. In desperation, some may attempt suicide as the only way of escape.
- Bailout costs: Pathological gamblers may need to be bailed out by friends or relatives. For example, a family member may pay the mortgage to help the gambler out of a tough financial situation.
- Unrecovered loans to pathological gamblers: This is similar to bailout costs, but would be a cash loan, instead, that the gambler does not pay back. From the lender's perspective, this would be a cost.
- Unpaid debts and bankruptcies: If a disordered gambler fails to pay his/her bills, or files for bankruptcy, the unpaid debts due to gambling represent losses to the creditors.
- Higher insurance premiums resulting from pathological gambler-caused fraud: If pathological gamblers engage in fraud, or otherwise act in criminal ways to gain financially (or get money with which to gamble), it may lead to higher insurance premiums for others in society.
- Corruption of public officials: Many casino critics argue that casino interests may corrupt public officials. This may occur through bribes or other means. Monetary measurement of this cost would be particularly difficult.
- Strain on public services: When a casino is built in a small community and the casino's tourists represent a large increase in the local population, public services such as roads, water and sewer, etc., may be strained. Improvements to this infrastructure entail significant costs for the local community.
- Industry cannibalization: The industry cannibalization argument is synonymous with the "substitution effect," which is discussed elsewhere in the Florida report. It represents jobs and profits lost in other businesses or industries that must compete with casinos.
- Divorce caused by gambling: Gambling disorder often takes a toll on personal relationships, sometimes because of dishonesty trying to cover up the extent of gambling, as well as the financial strain that a gambling problem can create or exacerbate. In some cases, the excessive gambling can be a key contributing factor to divorce.

- Abused dollars: The concept of “abused dollars” was introduced during a 1981 study, but more recently, the term has been revived and redefined by Grinols, who defines it as “lost gambling money acquired from family, employers, or friends under false pretenses” (p. 145). Grinols gives the example of money stolen from an employer but not reported to authorities.

This list of cost items (except abused dollars) is taken from Walker’s book, which provides a comprehensive discussion and also cites more than 30 research papers and reports that focus on the social costs of gambling.²⁷⁰ Of course, different papers will cite different categories of cost, as we will see later in this section.

Among the most important reports that have addressed social costs are the National Gambling Impact Study Commission (1999),²⁷¹ and the National Research Council’s *Pathological Gambling: A Critical Review* (1999).²⁷² More recently, several comprehensive reports have come out of Canada, including the *Socio-Economic Impact of Gambling (“SEIG”) Framework* (2008)²⁷³ and the *Socio-Economic Impact of Gambling in Alberta* (2011).²⁷⁴

As an indication of how important the social cost issue is among the research community – and perhaps how much disarray characterizes it – there have been two separate conferences dedicated to trying to develop a workable methodology for defining and measuring social costs. These were the Whistler Symposium (Whistler, British Columbia, September 2000) and the 5th Annual Alberta Conference on Gambling Research (April 2006, Banff, Alberta, Canada). Papers from both conferences have been subsequently published.

2. Monetary Measurement of Social Costs

One of the best papers during the 1990s that represents the social cost literature is by Thompson, Gazel and Rickman.²⁷⁵ In this report, the authors provide a detailed accounting of

²⁷⁰ Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 155.

²⁷¹ National Gambling Impact Study Commission, “Final Report” (Washington, DC: Author, 1999). Available at <http://govinfo.library.unt.edu/ngisc/>.

²⁷² National Research Council, *Pathological Gambling: A Critical Review* (Washington, DC: National Academy Press, 1999). Available at http://www.nap.edu/catalog.php?record_id=6329.

²⁷³ Anielski Management Inc. “The Socio-Economic Impact of Gambling (SEIG) Framework: An Assessment Framework for Canada: In Search of the Gold Standard” (Canada: Inter-Provincial Consortium for the Development of Methodology to Assess the Social and Economic Impact of Gambling, 2008). Available at www.anielski.com/Documents/SEIG%20Framework.pdf.

²⁷⁴ Brad R. Humphreys, Brian P. Soebbing, Harold Wynne, John Turvey and Yang Seung Lee, “Final Report to the Alberta Gaming Research Institute on the Socio-Economic Impact of Gambling in Alberta” (Edmonton, Alberta: Alberta Gaming Research Institute, 2011).

²⁷⁵ William N. Thompson, Ricardo C. Gazel and Dan Rickman, “Social and Legal Costs of Compulsive Gambling,” *Gaming Law Review*, Volume 1, 1999, p. 81-89.

“the cost imposed upon society by compulsive gambling” (p. 81). They note that previous studies had not done a very good job at analyzing and quantifying social costs: “... for the most part, we have seen only attempts to either list all the cost factors without analysis and without totaling up the effects, or to offer numbers without any indication of how the numbers were determined.”²⁷⁶

In their own section on research methodology, Thompson et al. do not define what they mean by “social cost.” In their section on cost analysis, however, they do list the different categories of “cost” that they consider: “employment costs, bad debts and civil court costs, thefts and criminal justice costs, the costs of therapy, and welfare costs” (p. 87). The decision to include these different items in their social cost estimate appears to be based on the survey instrument they used with Gamblers Anonymous members, in asking them to estimate different amounts in these categories. Thompson et al. explain that their inclusion of these survey items is based on the decision to use a survey instrument developed by Henry Lesieur in the development of their own survey instrument (p. 83).²⁷⁷

Thompson et al. surveyed 98 Gamblers Anonymous members in Wisconsin. Based on their analysis of the survey responses, the researchers estimate the annual social cost per compulsive gambler to be \$9,469.²⁷⁸ This amount is derived from the individual cost categories listed in the table below.

Figure 103: Estimated annual social costs of gambling, per disordered gambler

Employment		\$2,941
Lost work hours	1,329	
Unemployment compensation	214	
Lost productivity/unemployment	1,398	
Bad debts		1,487
Civil court		848
Bankruptcy court	334	
Other civil court	514	
Criminal justice		3,498
Thefts	1,733	
Arrests	48	
Trials	369	
Probation	186	
Incarceration	1,162	
Therapy		361
Welfare		334
Aid to Dependent Children	233	
Food stamps	101	
Total		\$9,469

Source: William N. Thompson, Ricardo C. Gazel, and Dan Rickman, “Social and Legal Costs of Compulsive Gambling,” *Gaming Law Review*, Volume 1, 1999, p. 87.

²⁷⁶ William N. Thompson, Ricardo C. Gazel and Dan Rickman, “Social and Legal Costs of Compulsive Gambling,” *Gaming Law Review*, Volume 1, 1999, p. 83.

²⁷⁷ The Thompson et al. paper does not include the survey items, so these cannot be commented upon further.

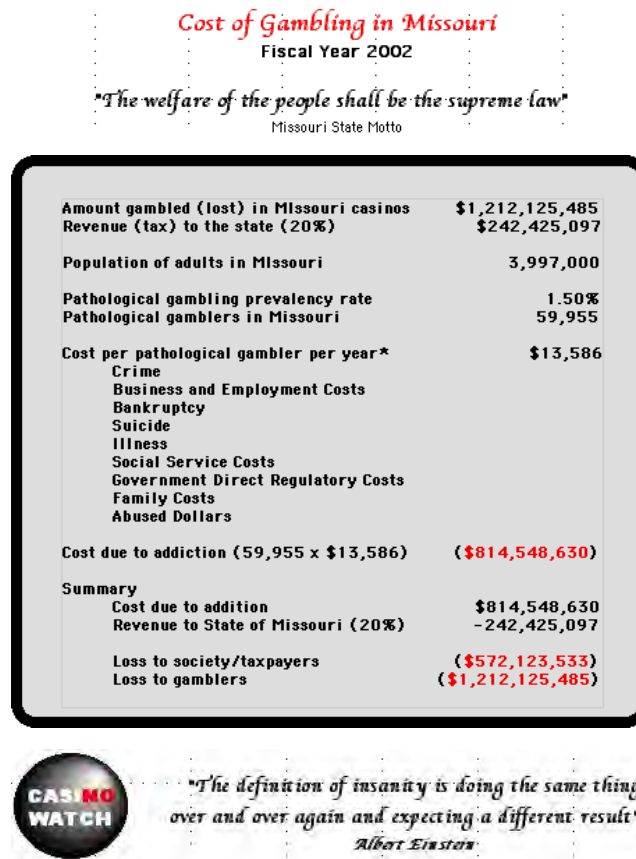
²⁷⁸ There was actually an arithmetic error in Thompson, Gazel and Rickman’s summary table (1997, p. 87). In order to correct it, we have added a dollar to the item “Lost work hours.”

The authors provide a detailed explanation for how each of the costs is calculated (p. 88). We will discuss social cost measurement issues later in this section.

Thompson et al. estimate the total cost for Wisconsin at \$307 million per year, assuming that 32,425 residents may be compulsive gamblers. In many studies, what is done to derive a “total” social cost for a region or state is to take the estimated social cost per pathological gamble, and multiply it by an estimated number of pathological gamblers in the state/region. This number would be derived by multiplying psychologists’ prevalence estimate for gambling disorder (say, 1 percent of the general population) by the population.

Social cost estimates are commonly cited in political debates over casinos. Figure 104, provided by Casino Watch, provides an example of a social cost estimate being used in political debate; this shows how the estimated social costs of gambling far outweigh the tax revenues to the state from the introduction of casinos in Missouri.

Figure 104: Estimated social costs of gambling in Missouri



Source: CasinoWatch.org www.casinowatch.org/costs/gambling_costs_mo.html (Accessed July 25, 2013). The website credits a draft of Grinols and Mustard’s published paper.²⁷⁹

²⁷⁹ Earl L. Grinols and David B. Mustard, “Business Profitability Versus Social Profitability: Evaluating Industries with Externalities, the Case of Casinos,” *Managerial and Decision Economics*, Volume 22, 2001, p. 143-162.

In a social cost study of Las Vegas published during 2005, researchers estimated the social costs of gambling in southern Nevada at between \$314 million and \$545 million per year.²⁸⁰ Yet in a response article, it was shown that many of the assumptions used to derive the estimate were questionable or somewhat arbitrary.²⁸¹ Indeed, under reasonable alternative economic assumptions, the costs would amount to between \$25 million and \$44 million per year.²⁸² Social cost estimates, such as that developed by Thompson et al. and Thompson and Schwer, were rather commonly cited during the 1990s, despite the fact that there were extremely limited data on social costs. In *Casinomics* (Table 13.2, p. 162), Walker lists a variety of different monetary estimates of the social costs of gambling. We list those plus several others from the literature:

Figure 105: Social cost estimates from the economics literature (per disordered gambler per year)

Goodman (1995) ²⁸³	\$13,200
Grinols (2004) ²⁸⁴	\$13,330
Grinols and Omorov (1996) ²⁸⁵	between \$15,000 and \$33,500
Kindt (1995) ²⁸⁶	\$53,000
Maryland (1990) ²⁸⁷	\$30,000
Thompson, Gazel, Rickman (1997) ²⁸⁸	\$ 9,469
Thompson and Schwer (2005) ²⁸⁹	\$19,711

Source: Douglas M. Walker, *Casinomics*.

²⁸⁰ William N. Thompson and Keith Schwer, "Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada," *Journal of Public Budgeting, Accounting & Financial Management*, Volume 17, 2005, p. 62-93.

²⁸¹ Douglas M. Walker, "Clarification of the Social Costs of Gambling," *Journal of Public Budgeting, Accounting & Financial Management*, Volume 20, 2008, p. 141-152.

²⁸² *Ibid.*, p. 147.

²⁸³ Robert Goodman, "Legalized Gambling: Public Policy and Economic Development Issues." *Economic Development Review*, Volume 13, 1995, p. 55-57.

²⁸⁴ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004).

²⁸⁵ Earl L. Grinols and J.D. Omorov, "Development or Dreamfield Delusions? Assessing Casino Gambling's Costs and Benefits," *Journal of Law and Commerce*, Volume 16, 1996, p. 49-87.

²⁸⁶ John W. Kindt, "U.S. National Security and the Strategic Economic Base: The Business/Economic Impacts of the Legalization of Gambling Activities," *Saint Louis University Law Journal*, Volume 39, 1995, p. 567-584.

²⁸⁷ Task Force on Gambling Addiction in Maryland, 1990. "Final Report." (Baltimore, MD: Maryland Department of Health and Mental Hygiene, 1990.)

²⁸⁸ William N. Thompson, Ricardo C. Gazel and Dan Rickman, "Social and Legal Costs of Compulsive Gambling," *Gaming Law Review*, Volume 1, 1997, p. 81-89.

²⁸⁹ William N. Thompson and Keith Schwer, "Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada," *Journal of Public Budgeting, Accounting & Financial Management*, Volume 17, 2005, p. 62-93.

Certainly, such large estimated social costs must raise concern over whether legalizing casinos will really create the benefits so often expected from casino expansion.

Unfortunately, monetary social cost estimates cannot always be taken at face value. With such a wide range of estimates, one must wonder if these different studies are measuring the same thing, and if so, then how their methodologies differ. Grinols' 2004 example helps to emphasize this point. Grinols' estimate of \$13,330 is based on the average of nine other studies with wide-ranging social cost estimates.²⁹⁰ Only two or three of these studies were eventually published in peer-reviewed journals. The wide-ranging social cost estimates from the literature raise both methodological and empirical issues.

Critics of such studies have argued that the wide range of monetary estimates is due to (1) lack of a definition of social costs; (2) data problems, including peculiarities in the measurement methodologies; and (3) various confounding factors. We examine each of these issues below.

3. Critiques of Social Cost Estimates

Many of the social cost estimates that have been continually cited in the literature and in political and popular debate over casinos were written back during the mid-1990s. For example, Goodman's estimate of \$13,200 was commonly cited because it was one of the first social cost estimates to appear in the literature. Such monetary estimates are repeated often simply because there has been little effort on the part of researchers, policymakers and analysts to assess the validity of such social cost estimates. Walker's work has focused on social cost measurement and methodological concerns. In addition, others have raised similar questions. Perhaps one of the earliest critiques of the state of social cost research was in the National Research Council's book, *Pathological Gambling: A Critical Review* (especially chapter 5).²⁹¹

Chapter 5 in *Pathological Gambling* provided a detailed discussion of the various impacts from gambling disorder (p. 156-162), as well as a review of some studies that were considered to be reasonable at the time the *Pathological Gambling* book was published in 1999 (p. 171-185). It also includes a frank discussion of the problems in the social cost literature at that time, several of which we discuss below. Unfortunately, not much has changed with respect to the quality of research since 1999. We reiterate some of the National Research Council's discussion here because it still seems relevant. Three issues, in particular, are reviewed: (1) use of Gamblers Anonymous members' information for estimating impacts; (2) real versus transfer effects; and (3) tangible versus intangible effects.

The National Research Council warned that many studies on the social costs of gambling base their estimates on the experiences of individuals in treatment, such as Gamblers

²⁹⁰ See Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004), p. 172-174.

²⁹¹ National Research Council, *Pathological Gambling: A Critical Review* (Washington, D.C., National Academy of Sciences, 1999). Available at http://www.nap.edu/catalog.php?record_id=6329

Anonymous members. There is no reason to believe, however, that individuals seeking treatment for their gambling problem are representative of problem gamblers, in general: "... it can be argued that those who seek treatment generally are worse off financially and therefore have amassed larger debts than those not in treatment."²⁹² If this is the case, then it is inappropriate to generalize "social cost" items such as bad debt expenses from Gamblers Anonymous members to pathological gamblers, in general.

Aside from this, on the issue of debt accumulated by pathological gamblers, the National Research Council notes, what is relevant is not the total amount of debt they accumulate, but rather the amount in excess of the average person's debt. Many individuals carry debt, and the relevant amount over which we might raise concerns is the amount of debt above and beyond what the average person may be expected to accumulate.

These concerns are relevant for any study that has used Gamblers Anonymous members to derive survey data for estimating social costs, or for any study that has relied on pathological gamblers in treatment. The implication is that social cost estimates based on these individuals likely overestimate the social costs of gambling because the cost estimate is based on individuals who are seeking help, rather than on pathological gamblers, in general. Taking average expected debt into account compounds this issue.

A second concern described in *Pathological Gambling* is the confusion between "real" and "transfer" effects.²⁹³ This is an issue that has received much attention in the literature. The National Research Council gives an example of borrowing money as to why it should not be considered a real cost of gambling and, instead, should be considered a transfer effect. When a person borrows money for current consumption (say by taking a loan to buy a car, or making a clothing purchase with a credit card), the person is essentially transferring spending from their future to their present. The credit card balance has to be paid in the future, perhaps with an interest charge. Nevertheless, it is essentially just increasing current spending at the expense of future spending, through an intermediary like a bank or credit card company.

Other impacts of gambling that are included in social cost estimates are simply transfers, with no loss to society. As a result, they do not belong in social cost estimates. We will discuss this issue in more detail below.

A third concern from *Pathological Gambling* is tangible versus intangible effects. There are certain effects that are fairly obvious and easy to measure; these are often the more tangible effects of casinos. However, the intangible effects, difficult as these might be to measure, are just as important when attempting to evaluate the costs and benefits of legal casinos. The tangible social costs of gambling disorder could include criminal justice and incarceration costs for

²⁹² National Research Council, *Pathological Gambling: A Critical Review* (Washington, D.C., National Academy of Sciences, 1999), p. 168. Available at http://www.nap.edu/catalog.php?record_id=6329

²⁹³ National Research Council, *Pathological Gambling: A Critical Review* (Washington, D.C., National Academy of Sciences, 1999), p. 163-164. Available at http://www.nap.edu/catalog.php?record_id=6329

individuals convicted of gambling-related crimes, and treatment for gambling problems. These costs may be sizable. Yet, certain intangible social costs might be even greater, such as the “psychic costs” or anguish associated with the strain on personal relationships, and other interpersonal problems that are, at the root, caused by a gambling problem. These intangibles defy monetary measurement and usually are not included in social cost estimates from the literature.

The National Research Council notes other problems with research in the area of social costs. Considered as a group, these criticisms raise serious questions about social cost estimates and raise concern whether they should be used at all in informing government policy. This is not to say, of course, that there are not social costs. Indeed, psychologists have done a good job in outlining the *types of harms* often associated with a gambling disorder. Simply put, the science behind putting monetary values on these harms is simply not developed. The National Research Council summarizes:

Most reported economic analysis in the literature is methodologically weak. In their most rudimentary form, such studies are little more than a crude accounting, bringing together readily available numbers from a variety of disparate sources. Among studies of the overall effects of gambling, such rough-and-ready analyses are common. In the area of gambling, pathological gambling, and problem gambling, systematic data are rarely to be found, despite considerable pressure for information. The consequence has been a plethora of studies with implicit but untested assumptions underlying the analysis that often are either unacknowledged by those performing the analysis, or likely to be misunderstood by those relying on the results. Not surprisingly, the findings of rudimentary economic impact analyses can be misused by those who are not aware of their limitations (p. 162).

Next we discuss several issues in more detail to illustrate why social cost estimates should be used with extreme caution, if they are used at all.

4. Definitional Issues

At the beginning of our discussion, we listed several effects that are typically included in social cost estimates in the literature. We also listed some of the wide-varying monetary estimates from the literature, including the \$9,469 estimate from the Thompson et al. paper (1997). Interestingly, the authors of that study do not provide a definition of “social cost” that they are trying to measure. No other study up to that point had defined “social cost” either, prior to trying to estimate its value. This lack of a social cost definition was the focus of a 1999 paper by Walker and Barnett²⁹⁴ that raised concerns about all studies in the area of social costs.

²⁹⁴ Douglas M. Walker and A. H. Barnett, “The Social Costs of Gambling: An Economic Perspective,” *Journal of Gambling Studies*, Volume 15, 1999, p. 181-212.

Walker and Barnett argued that, since researchers have not defined social cost, they use *ad hoc* methodologies in determining what to measure and how to measure it. This lack of definition accounts, in part, for the wide variance in monetary estimates of social costs. In their attempt to help move social cost research forward, the authors offered an economic definition of social cost. They posited that social cost is “the amount by which [an] action reduces aggregate societal real wealth” (p. 185). Wealth refers to monetary wealth, but it also includes anything else valued in society, such as clean air. The authors go on to explain that “wealth” also refers to individuals’ well-being, and reductions in that can be considered to be social costs (p. 191). This suggests that, for example, the anguish felt by pathological gamblers’ families could be included in social cost estimates.

One of the key arguments made by Walker and Barnett is that wealth transfers should not be considered to be social costs, since the cost to one person is offset by a gain to another. Taxes, for example, are also transfers of wealth. The tax revenues benefit the recipient (government, or whomever government gives the tax money to), while there is an equivalent loss, to whomever has to pay the tax. Then the gains and losses are equivalent; there is no net change (loss) in aggregate societal wealth, and so taxes do not represent a social cost (or benefit). We will discuss more of the implications of this definition later.

This argument about transfers is controversial among non-economists. It applies not only to taxes, but also would apply to birthday gifts and even theft. It would apply in any case where benefits to one person or group are offset by the costs to another. The argument made by Walker and Barnett regarding transfers – that they should not be included as social costs of gambling disorder – is generally supported by the National Research Council²⁹⁵ and in a Federal Reserve report;²⁹⁶ it is also supported by a variety of researchers, including Eadington,²⁹⁷ Collins and Lapsley²⁹⁸ and Single.²⁹⁹

²⁹⁵ National Research Council, *Pathological Gambling: A Critical Review* (Washington, D.C., National Academy of Sciences, 1999). Available at http://www.nap.edu/catalog.php?record_id=6329

²⁹⁶ Douglas Clement, “Gambling: A Sure Thing?” *Fedgazette* (Minneapolis, MN: Federal Reserve Bank of Minneapolis, 2003). Available at http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=1831

²⁹⁷ William R. Eadington, “Measuring Costs from Permitted Gaming: Concepts and Categories in Evaluating Gambling’s Consequences,” *Journal of Gambling Studies*, Volume 19, 2003, p. 185-213.

²⁹⁸ David Collins and Helen Lapsley, “The Social Costs and Benefits of Gambling: An Introduction to the Economic Issues,” *Journal of Gambling Studies*, Volume 19, 2003, p. 123-148.

²⁹⁹ Eric Single, “Estimating the Costs of Substance Abuse: Implications to the Estimation of the Costs and Benefits of Gambling,” *Journal of Gambling Studies*, Volume 19, 2003, p. 215-233.

Others firmly disagree with the definition of social cost offered by Walker and Barnett. For example, in response to the criticism by Walker and Barnett of the lack of social cost definition in the literature, Thompson, Gazel and Rickman (1999, p. 3)³⁰⁰ explain,

We are defining social costs for our study, we are not deferring to definitions that others make, no matter their status in any academic discipline. The social costs we are seeking to reduce to dollar figures are the costs that the gambler imposes upon people who are not participating in the gambling process as a result of his or her gambling and gambling related activities. The social costs of gambling are burdens that the gambler imposes on others. Others would not have these burdens if the individual were not participating in gambling activities. Social costs ARE cost transfers from one individual who is gambling to others who are not involved in gambling.

Thompson et al. go on to explain that they view it as perfectly fine that different researchers employ different definitions of social cost:

We reject criticisms of our model which say that *social costs* may not include costs that are imposed upon non-gambling individuals or groups of individuals while not being imposed upon all the members of society... Our critics have suggested that we cannot call theft a social cost. WE DO CALL THEFT A SOCIAL COST... We do not say our critics are wrong. Not at all. They are simply pursuing a different definition of social costs than we are pursuing. It is a matter of apples and oranges.

The key element of the Thompson et al. definition is that social costs generated by pathological gamblers are borne by other people. This certainly sounds reasonable, but there is a “slippery slope” effect, whereby any negative impact that is remotely related to gambling might become included in the social costs of gambling. Perhaps the best example of this is the concept of “abused dollars” first posited by Politzer, Morrow and Leavey in a 1981 conference paper. The paper was published in 1985, and we quote it for the definition of “abused dollars” (p. 133):³⁰¹

... [The] amount [of money] obtained legally and/or illegally by the pathological gambler which otherwise would have been used by the pathological gambler, his family, or his victims for other essential purposes. These abused dollars include earned income put at risk in gambling, borrowed, and/or illegally obtained dollars spent on basic needs and/or provided to the family which otherwise would have been “covered” by that fraction of

³⁰⁰ William N. Thompson, Ricardo C. Gazel and Dan Rickman, “The Social Costs of Gambling: A Comparative Study of Nutmeg and Cheese State Gamblers,” *UNLV Gaming Research & Review Journal*, Volume 5, 1999, p. 1-15.

³⁰¹ Robert M. Politzer, James S. Morrow and Sandra B. Leavey, “Report on the Cost-Benefit/Effectiveness of Treatment at the Johns Hopkins Center for Pathological Gambling,” *Journal of Gambling Behavior*, Volume 1, 1985, p. 131-142.

earned income which was used for gambling, and borrowed and/or illegally obtained dollars for the partial payment of gambling related debts.

While this might seem reasonable to include as a social cost, and we can perhaps sympathize with the spirit of “abused dollars,” as a concept, it has enormous problems. Walker has discussed these problems in detail.³⁰² He explains (p. 168):

... The concept is too vague to be useful. For example, measuring the amount of dollars spent gambling that “could have been used for other essential purposes” does not provide much information. First, what is an “essential purpose”? The concept loses its meaning once we consider gambler income levels. Is an “essential purpose” for a millionaire the same as for a person with average income? Furthermore, a generous interpretation of “abused dollars” would imply that the sum of all money bet (i.e., handle) represents abused dollars. This is likely to be significantly higher than the actual amount lost by a casino gambler. The concept also treats borrowed money as abused dollars.

Other than in the 1985 paper, the term “abused dollars” had not been used again, to our knowledge, until Earl Grinols resurrected the term in his 2004 book.³⁰³ Grinols (p. 145) defined abused dollars as “lost gambling money acquired from family, employers, or friends under false pretenses. Although this is somewhat more precisely defined than Politzer, Morrow, and Leavey’s original definition, it still has problems. How does Grinols (or others) determine whether a situation qualifies as “false pretenses”? More to the point, the range of estimates for abused dollars varies dramatically across studies. In the studies Grinols reports in his book, the range is from \$271 to \$29,055.³⁰⁴ This raises serious doubts as to whether the concept has any concrete meaning at all.³⁰⁵ The wide range of cost in this category certainly highlights the concern about different research methodologies, as one would not expect such a variance across jurisdictions for any particular type of cost.

The fundamental problem with most social cost studies published to date is that they fail to define clearly what they are trying to measure. Although it is clear that such studies attempt to provide some measure of the harms created by problem gambling, it is less clear whether they do a reasonable job. Some studies include certain types of costs; others exclude the same costs. All of this leaves the literature replete with unique studies. As such, the economic literature provides no basis for comparison across jurisdiction or through time. In contrast, psychologists have a

³⁰² Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 168.

³⁰³ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004).

³⁰⁴ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004), p. 173-174

³⁰⁵ The problem is probably that Grinols has classified items from the different studies as “abused dollars.” We do not believe the different studies did that on their own.

very well-defined list of criteria they use for the diagnosis of gambling disorder. Actually, they have several diagnostic instruments, such as the DSM-IV, DSM-V, or SOGS:³⁰⁶ when one researcher writes that they have used the DSM-IV, for example, other researchers know immediately and exactly what criteria the researcher used. Despite the debates associated with the diagnostic criteria, the criteria are clear. Such clarity is not the case in the social cost literature. This presents a significant problem for consumers of such research, if their interest is in understanding the nature of social costs and having an unbiased estimate of their value. Walker notes the importance of having objective criteria for the definition and measurement of social costs:³⁰⁷

Just as objective criteria are useful in estimating the prevalence of pathological gambling, objective criteria are important for the measurement of social costs. Harberger [1971] makes this point in the context of welfare economics, in general, and cost-benefit analyses, in particular: “Just as the road-construction standards that a team of highway engineers must meet can be checked by other highway engineers, so the exercise in applied welfare economics carried out by one team of economists should be subject to check by others.”

The main problem with the lack of definition of social cost is that it enables researchers who have a particular bias – either pro- or anti-gambling – to define cost however they like and generate a social cost estimate that is either low or high, tailored to their own political biases. Walker’s view is that this is one explanation why researchers such as Goodman, Kindt and Grinols have often produced relatively high social cost estimates.³⁰⁸ The use of “abused dollars” by Grinols is a specific example of the problem. On the other hand, researchers such as Kindt or Grinols may suggest that Walker’s adjustments to social cost estimates by Thompson et al., understate the true social costs of gambling disorder.

As the discussion here has shown, researchers of the social cost of gambling do not even agree on the definition of social cost. This issue is the foundation for other problems in the literature, such as the data and measurement issues discussed in the next section. Although there is not one universally accepted definition of “social cost” in the literature, there appear to be two main schools of thought that have emerged.

First is the more common perspective that anything that appears to be a negative impact associated with problem gambling should be measured (if possible) to develop a social cost estimate. This perspective would seem to be that shared by Thompson et al., Grinols, Goodman,

³⁰⁶ The DSM-IV is the Diagnostic and Statistical Manual, 4th edition, from the American Psychiatric Association. SOGS is the South Oaks Gambling Screen, which comes from a 1987 journal paper.

³⁰⁷ Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 155.

³⁰⁸ See Douglas M. Walker, *The Economics of Casino Gambling* (New York, NY: Springer, 2007), chapter 8.

Kindt and Anielski.³⁰⁹ Studies that rely on this conception of social cost would include all of the social cost categories that were listed at the beginning of this section and possibly others. These types of studies typically do not have a concrete definition/conception of what “social cost” means, or what should be included or excluded. Politicians, voters and interest groups that tend to oppose legalized gambling often endorse these studies that are more inclusive of cost categories. One explanation for this could be that these studies tend to produce relatively high social cost estimates.

The second perspective is the economic perspective that was first outlined in detail by Walker and Barnett (1999). Economists such as Eadington, Collins, Lapsley, Humphreys and a few researchers in other disciplines endorse this view. The key de facto difference between the economic perspective and the ad hoc approach on social costs is that the economic perspective does not include transfers of wealth in its conception of social cost. Among the social cost categories listed at the beginning of this section, the following would not be included as social costs under the economics definition: income lost from missed work, decreased productivity on the job, bailout costs, unrecovered loans to pathological gamblers, unpaid debts and bankruptcies, higher insurance premiums and abused dollars. These all represent transfers of wealth and do not cause a reduction of wealth in society. What is left – the different categories that would represent social costs under the economic conception – include: legal costs, treatment costs and “psychic costs” or anguish.

Critics of the economic perspective argue that ignoring transfers or other “internalized” costs is akin to sweeping under the rug key negative impacts from gambling disorder. Yet, if economic estimates include some transfers of wealth to be categorized as social costs, then why not simply include all losses at casinos (or revenues for casinos)? What is the fundamental difference? Allowing financial transfers to be considered as social costs in the field of gambling studies would corrupt the fundamental way in which we understand economics. For example, in other economic areas unrelated to gambling, economists could begin to consider home mortgages, car loans and philanthropic pledges as social costs.

Developing a basic definition of social costs is much more complicated than it seems at first blush. Nevertheless, even if there was a universal definition of social cost to which everyone subscribed, there are data and measurement issues that render social cost estimation an impossibly flawed endeavor. We address the data issues next.

³⁰⁹ These authors have been cited previously in this section. The Anielski reference is to the more comprehensive Canadian study, which provides a general framework that outlines almost any “cost” item imaginable: Anielski Management Inc. “The Socio-Economic Impact of Gambling (SEIG) Framework: An Assessment Framework for Canada: In Search of the Gold Standard” (Canada: Inter-Provincial Consortium for the Development of Methodology to Assess the Social and Economic Impact of Gambling, 2008). Available at www.anielski.com/Documents/SEIG%20Framework.pdf.

5. Data Quality

Even if we could ignore the definitional issue discussed in the previous sub-section – or even if we agreed that it simply does not matter what the definition of “social cost” is and that our goal should be simply to measure all of the negative impacts of gambling disorder, the methodologies for measuring such costs are astonishingly primitive. Part of this is no fault of researchers, as some of the social costs are simply incalculable. However, other components of social cost that are, at least conceptually, measurable are done using a variety of surprisingly arbitrary assumptions.

a. *Unmeasurable Social Costs*

In this section, we discuss some of the social costs that defy monetary measurement, with the ultimate effect of either creating extreme variance in social cost estimates, or causing an understatement in social cost estimates because the cost is ignored entirely. We again return to the list of social cost categories presented at the beginning of this section. Among those, the following costs defy monetary measurement: Depression and physical illness related to stress; increased suicide attempts; corruption of public officials; and divorce caused by gambling. In addition to these categories, we could add a general category of anguish on the part of the pathological gambler and relatives, friends or co-workers who are also impacted by the pathological gambler.

Psychologists have provided ample evidence that pathological gamblers engage in a variety of behaviors that are damaging to their personal and professional relationships and that cause financial hardship. We may very well be able to indicate a percentage of the general public that is likely to experience any particular type of problem. For example, perhaps 30 percent of pathological gamblers experience a divorce that is directly attributable to their gambling disorder. Attempting to put a monetary value on the experience of a divorce is a completely different matter.

Divorce can be considered to be a social cost of gambling disorder because it might not have otherwise happened in the absence of the gambling problem. Then the monetary resources used to execute the divorce (e.g., lawyers’ fees, court costs, etc.) would be included in the social costs of gambling because these resources could otherwise have been used in other ways, were it not for the gambling disorder. These costs, which can easily be stated in monetary terms, are obviously relatively easy to handle in a social cost calculus.

In addition, however, according to the economics definition of social cost, the anguish or “psychic costs” associated with the divorce, on the part of the pathological gambler, the spouse, children and affected relatives and friends, could all be considered to be social costs of gambling. Yet, there is no practical way of creating a monetary estimate of these costs. Walker³¹⁰ notes

³¹⁰ Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 166.

that, “The value of psychic costs could be measured by asking individuals how much they would be willing to pay to avoid them. Surveys asking such questions would need to be very carefully constructed in order to be valid.”³¹¹ We are unaware of any such surveys having actually been performed in the social cost literature.

The same issues arise with other “intangible” costs associated with gambling disorder. It is important to note that the magnitude or severity of such costs may be extremely high, even in comparison to some of the social costs that are more easily measurable.

One could argue that we could simply multiply the measurable social costs by some factor (say, 2, for example) in order to account for the intangible social costs. But the resulting social cost estimate would be largely arbitrary and would not be particularly useful for informing a cost-benefit analysis on which policymakers are likely to rely in formulating gambling-related policy.

b. Other Measurement Problems

In the sub-section above, we discussed a critical problem with a variety of social costs of gambling that are intangible and are, therefore, not amenable to monetary measurement. Yet, even among the social costs that can be measured, there is a large degree of uncertainty in these measurements.

In some cases, researchers simply repeat a social cost figure from another source, without any attempt to confirm the quality of the methodology used or to determine whether the item should be included in the social cost measure at all. Most social cost studies fall into this category. For example, in Grinols’ book, he provides a social cost estimate of \$10,330 per gambling disorder per year. The estimate is based entirely on averaging other social cost estimates from the literature, few of which went through any rigorous peer-review process to ensure some basic level of quality, and none of which Grinols (apparently) reviewed critically.

A more dramatic example is the work by Kindt.³¹² Kindt generally cites other social cost estimates, but the costs he cites are typically the largest that can be found in the literature (\$53,000). However, it is unclear how seriously Kindt’s work should be taken, given – as in his previously cited work – that he suggests that legalized gambling could undermine U.S. national security.

³¹¹ Among the potential problems with such a survey would be the possibility that respondents would not provide honest responses. In addition, respondents with different levels of income or wealth likely would give very different answers to questions such as this.

³¹² For example, see John W. Kindt, “U.S. National Security and the Strategic Economic Base: The Business/Economic Impacts of the Legalization of Gambling Activities,” *Saint Louis University Law Journal*, Volume 39, 1995, p. 567-584.

The comprehensive Canadian report by Anielski (2008) was an admirable attempt to develop a “gold standard” for the classification and measurement of social costs.³¹³ However, in a critique of the report written for the Canadian Gaming Association, Walker noted that the flexibility of the framework was also potentially detrimental because researchers could then insert their own biases into analyses in their decisions of what items to include or exclude from their analyses.³¹⁴ In addition, although the SEIG report’s authors recognized measurement problems in socio-economic studies, the same measurement problems apply to their own framework.

To be sure, a “gold standard” for classifying and measuring social costs would be enormously beneficial in the literature, but will likely remain elusive. But consider one type of social cost, and the range of estimates for it. Grinols (2004) presents the monetary estimates for social costs from a variety of different studies. For “adjudication (criminal and civil justice costs)” there are the following monetary estimates for the social costs per pathological gambler:

Figure 106: Estimates of annual adjudication costs per disordered gambler

Jurisdiction	Estimated Social Cost
Maryland	\$3,619
Wisconsin	\$ 733
Connecticut	\$ 568
South Dakota	\$ 31
Louisiana	\$ 420
South Carolina	\$ 252
Nevada	\$ 173

Source: Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004), p. 172-173.

It is conceptually possible that there are such starkly different costs in different states. However, it is also quite likely that each of the studies has measured this cost differently. The researchers were probably working with different data sources, and these may or may not have been reporting the same things. There is no indication that Grinols went to any effort to evaluate the quality or consistency of these different estimates.

The differences in cost estimates for this particular category is perhaps a justification for simply averaging the different cost estimates, as doing so would tend to minimize the impact of any outlier or particularly odd measurement methodology. Nevertheless, it remains the fact that there is no generally accepted way of measuring any particular social cost category.

Next, we turn to how a particular type of social cost was measured in one particular social cost study. This exercise is intended to show how arbitrary some social cost estimates are,

³¹³ Anielski Management Inc. “The Socio-Economic Impact of Gambling (SEIG) Framework: An Assessment Framework for Canada: In Search of the Gold Standard” (Canada: Inter-Provincial Consortium for the Development of Methodology to Assess the Social and Economic Impact of Gambling, 2008). Available at www.anielski.com/Documents/SEIG%20Framework.pdf.

³¹⁴ Douglas M. Walker, “Issues to Consider in Implementing the ‘Socio-Economic Impact of Gambling (SEIG) Framework,’” Report prepared for the Canadian Gaming Association, August 2008.

due to the need to make a variety of arbitrary assumptions when estimating any particular cost type.

The 2003 Thompson and Schwer study cited by Grinols (2004) derived its cost estimates from a survey of 99 Gamblers Anonymous (“GA”) members in Las Vegas. Among the different items in the survey, one issue addressed is “lost work time.” As we noted previously, the idea here is that the pathological gamblers may skip work in order to gamble. Thompson and Schwer consider this to be a social cost since it does affect either the gambler, who loses income, or the employer, who pays the worker even though they did not work. (An economics definition of social cost would treat this as an internalized cost – the cost falls on either the employer or employee, and those two have a voluntary contract, so that there is no external, social aspect to the cost.)

The estimated cost for lost work time is based on the GA survey responses.³¹⁵ Among the 89 respondents for that particular question, 50 (or 56 percent) indicated they missed work because of gambling. They reported an average of 17.22 hours missed during each month, due to gambling. The average loss is 9.67 hours per month, allocated across the 89 respondents. This amounts to 116.1 hours per year (calculated, $[(50 \times 17.22)/89] \times 12$). The 116.1 hours is then multiplied by \$15/hour, the hourly wage rate based on Thompson et al.’s 1996 study’s use of an average annual pay rate of \$23,610. This then results in an estimated cost of \$1,742 for lost work time, per pathological gambler, per year.

To Schwer and Thompson’s credit, they have perhaps taken the most reasonable way possible, given their data, to estimate the value of lost work time. But it is clearly an arbitrary calculation. The criticism cited earlier from the National Research Council would seem to be particularly relevant: that Gamblers Anonymous members are unlikely to be representative of pathological gamblers, as a group. We would expect that the lost work hours by GA members should probably overstate the lost work hours for pathological gamblers in general.

In this section, we have briefly explored some of the potential problems with measuring social costs by considering one example of how a cost item is estimated based on GA survey responses. Clearly, researchers have done the best they can with the data available to them to provide estimates of social costs. But even with the best of intentions, it should be acknowledged that social cost estimation is extremely primitive and is largely arbitrary. Unfortunately, there simply is not a good source of objective data that can be used for the estimation of most types of social costs.

³¹⁵ The following discussion paraphrases the material reported on p. 11-12, of R. Keith Schwer, William N. Thompson and Daryl Nakamuro, “Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada,” paper presented at the 2003 Annual Meeting of the Far West and American Popular Culture Association, Las Vegas, NV, February 1, 2003. The paper was subsequently published in a journal in 2005 and is cited later in this report.

6. Comorbidity and Other Issues

Even if the definitional and measurement problems discussed above did not exist, there are several other issues that complicate social cost estimation. We briefly discuss some of these issues here.

a. Comorbidity

There is at least one problem with social cost studies that seems to be insurmountable and that renders social cost studies almost completely arbitrary (and certainly wrong). This is the problem of “comorbidity,” or co-existing disorders.

Social cost studies typically estimate the social costs of gambling per pathological (or problem) gambler per year, assuming that all of the costs being measured are attributable to the gambling problem. Few, if any, studies acknowledge the problem of comorbidity. For example, Grinols³¹⁶ averages previous estimates to suggest that the social cost of gambling disorder (per pathological gambler per year) is \$10,330. Yet if pathological gamblers have other behavioral disorders, certainly some of this \$10,330 is attributable to problems other than gambling disorder. Yet, there is no adjustment made for this fact.³¹⁷ As another example, the Thompson, Gazel and Rickman study (1997, discussed previously) surveyed Gamblers Anonymous members and based their \$9,469 social cost estimate on the survey responses from the GA members. However, the researchers did not do anything in their estimate to account for the fact that many of the GA members probably had other disorders. Walker cites some key studies on the issue, and we quote him:³¹⁸

The study by Petry, Stinson, and Grant³¹⁹ indicates the extent to which pathological gamblers exhibit other behavioral problems. They estimate that 73.2% of the U.S. pathological gamblers have an alcohol use disorder. The lifetime prevalence rate for drug use disorders among pathological gamblers is 38.1% and for nicotine dependence, 48.9%. Other comorbid conditions include mood disorders (49.6%), anxiety disorders (41.3%) and obsessive-compulsive personality disorder (28.5%) (Petry, Stinson and Grant, 2005,

³¹⁶ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004), p. 172-173.

³¹⁷ Grinols (2004, p. 173) does note that certain estimates “were adjusted by the author to correct for multi-causality according to Schwer et al. (2003) findings.” Yet it is unclear what Grinols means by “multi-causality” and exactly what adjustment he is making.

³¹⁸ Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 180-181.

³¹⁹ Nancy M. Petry, Frederick S. Stinson, Bridget F. Grant, “Comorbidity of DSM-IV Pathological Gambling and Other Psychiatric Disorders: Results from the National Epidemiological Surveys on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*, Volume 66, 2005, p. 564-574.

569). The study by Westphal and Johnson³²⁰ provides supporting evidence. Among their study subjects, 77% with a gambling problem had co-occurring behavior problems, and 56% had multiple problems.

To reiterate, if a pathological gambler has another disorder, such as alcoholism or a drug use disorder – or multiple co-occurring disorders – then it is likely that these other problems are at least partially responsible for the person’s anti-social and socially costly behaviors. Yet most social cost studies do not adjust their cost estimates for this fact.

One cannot necessarily blame researchers for not making such an adjustment, as there would not seem to be any obvious objective way to do this. Indeed, we find no analysis in the literature that provides a good methodology for dealing with the comorbidity issue in estimating the social costs attributable to gambling disorder. Nevertheless, researchers should at least acknowledge the problem. Yet few researchers who have estimated social costs have acknowledged the comorbidity problem.

There is one study, however, that acknowledges and even attempts to address the comorbidity problem. The study by Thompson and Schwer³²¹ segments their sample of Gamblers Anonymous members into two groups (one that had no addictions other than gambling, and another including people who had multiple addictions).

Gamblers Anonymous members into two groups (one that had no addictions other than gambling, and another including people who had multiple addictions).

For the entire group of 93 survey respondents, the average estimated social cost was \$19,711. But when the group was separated by the number of addictions, 54 had other addictions, and 39 did not. The estimated social cost for those with only the gambling problem was \$17,056, while the mean estimated costs for individuals with multiple disorders was \$20,962.³²² Thus, Thompson and Schwer conclude that the costs for pathological gamblers without coexisting disorders is about 81 percent of the cost of those who have multiple disorders. Yet even after suggesting the cost difference, the researchers suggest that additional costs attributable to the other disorders may be overstated. They argue that this is because gambling costs more as an activity than drugs, alcohol, tobacco or other addictions.³²³ While this may be true, from an economic perspective, the social costs of gambling generally aren’t based on the

³²⁰ James R. Westphal and Lera Joyce Johnson, “Multiple Co-occurring Behaviours Among Gamblers in Treatment: Implications and Assessment,” *International Gambling Studies*, Volume 7, 2007, p. 73-99.

³²¹ William N. Thompson and R. Keith Schwer, “Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada,” *Journal of Public Budgeting, Accounting & Financial Management*, Volume 17, 2005, p. 62-93.

³²² William N. Thompson and R. Keith Schwer, “Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada,” *Journal of Public Budgeting, Accounting & Financial Management*, Volume 17, 2005, p. 85-86.

³²³ *Ibid.*, p. 86.

amount of losses per se. Rather, the social costs are based on the wealth lost to society, such as from enforcement and treatment – resources that must be used in certain ways because of the existence of gambling disorder and are therefore diverted from other types of production. For this reason, we are skeptical of Thompson and Schwer’s attempt to deal with the comorbidity problem. Nevertheless, these authors should be given credit for acknowledging the problem and attempting to adjust their cost estimate accordingly. In the end, we believe their estimate is still problematic because the authors ask Gamblers Anonymous members to answer the survey with costs that they attributed solely to their gambling problem. It is unclear whether people with a serious gambling problem are likely to be able to do this objectively, especially when studies have found that such individuals cannot even estimate the amount of their gambling losses accurately.³²⁴

Even if researchers did have a way of allocating the social costs of pathological gamblers’ behavior to each person’s various behavioral disorders, another study suggests an even further complication. The report by Kessler et al.³²⁵ indicates that other comorbid disorders – other than gambling disorder – *usually precede the onset of gambling disorder*. Specifically, among “mood disorders,” “anxiety disorders,” “impulse-control disorders” and “substance abuse disorders,” only nicotine dependence was preceded by gambling disorder in over 50 percent of their sample group.³²⁶ The fact that gambling disorder usually is preceded by another problem may indicate that, as a secondary disorder, the gambling disorder may not be the primary catalyst for socially costly behaviors exhibited by pathological gamblers.³²⁷

In any case, there is no methodologically sound way to partition social costs among the different co-existing disorders of pathological gamblers. This problem may be the single greatest hurdle to researchers developing valid social cost of gambling estimates.

b. Surveys

As noted previously, some social cost estimates are based on surveys of pathological gamblers or of Gamblers Anonymous members. Another potential problem with social cost estimates, generally, is that we should not necessarily be confident that the GA members or pathological gamblers, in general, fill out such surveys with accurate information. They may

³²⁴ For example, see A. Blaszczynski, R. Ladouceur, A. Goulet and C. Savard, “‘How Much Do You Spend Gambling?’: Ambiguities in Questionnaire Items Assessing Expenditure,” *International Gambling Studies*, Volume 6, 2006, p. 127.

³²⁵ R.C. Kessler, I. Hwang, R. LaBrie, M. Petukhova, N.A. Sampson, K.C. Winters and H.J. Shaffer, “DSM-IV Pathological Gambling in the National Comorbidity Survey Replication,” *Psychological Medicine*, Volume 38, 2008, p. 1351-1360.

³²⁶ *Ibid*, p. 1357, Table 2.

³²⁷ Obviously, this statement is speculative, but this is an area that deserves more attention by researchers.

wish to understate or overstate the problems that they associate with gambling. Perhaps on average, these two effects average out, but we simply do not know.

More generally, we should be skeptical of any social cost estimates that are based on survey respondents' claims about how much they have lost gambling.³²⁸ When pathological gamblers are asked to estimate financial effects of gambling, such as the amount they lost gambling, research has shown that they are not very good at doing this:

Without specific instructions regarding how gambling expenditures are to be calculated, participants use different strategies. Different strategies used lead to variations in the expenditures reported and, therefore, cast doubt on the validity of the data and raise questions that there may be potential serious biases regarding gambling expenditures currently reported in the gambling literature.³²⁹

c. Counterfactual Scenario

Another problem with social cost estimates is that such research typically does not account for the “counterfactual scenario,” or what would have otherwise happened. In other words, a social cost of gambling estimate of \$9,469 per pathological gambler per year, based on a survey of GA members may implicitly assume that in the absence of legal gambling, such costs would not exist. Yet, this is clearly not the case.

A key policy question for Florida might be, “What is the marginal impact on social costs of the legalization of commercial casinos?” In the case of Florida, there is already legal gambling in various forms. If policymakers are interested in the social costs of gambling, the relevant costs are those marginal costs due to the expansion of gambling, not the absolute costs of gambling disorder. Given there are already gambling opportunities in Florida, there is already some number of pathological gamblers in Florida. If several standalone casinos are built and existing pari-mutuels are allowed to add slot machines, then the availability of various types of gambling obviously increases. But it would be inappropriate to then measure the social costs of gambling and then suggest (implicitly or explicitly) that this is the potential cost of a policy change of casino expansion in Florida.

We are unaware of any social cost estimate that has taken this issue into account. This suggests, then, that social cost estimates in the literature cannot generally be applied to estimate the social costs that are likely to result from a particular policy change. Rather, the social cost estimates in the literature reflect, instead, the social costs of gambling compared to a counterfactual in which there is *no gambling disorder*. Yet this is clearly not the situation, as

³²⁸ This issue may be particularly relevant for categories such as “abused dollars,” which appear to be largely based on the amount lost gambling.

³²⁹ A. Blaszczynski, R. Ladouceur, A. Goulet and C. Savard, “How Much Do You Spend Gambling? Ambiguities in Questionnaire Items Assessing Expenditure,” *International Gambling Studies*, Volume 6, 2006, p. 127.

even in the absence of legal gambling options, some people still gamble illegally or travel elsewhere to gamble legally, and there is still likely some level of gambling disorder.

In previous studies that Spectrum has performed in other states, we note that states that did not offer casino gambling at the time of our study – such as Massachusetts – still had significant numbers of adults with gambling disorders. In such instances, states that do not have casinos that provide funding for gambling treatment could be left with a funding deficit, while other states that have casinos and were hosting gamblers from other states had the reverse: They collected the gambling revenues but were under no obligation to provide treatment or funding for gamblers who lived in other states.

For Florida then, if we are interested in estimating the social costs that are likely to result from any particular policy change, it suggests that the relevant estimate should be the estimated social costs that would exist after the policy goes into effect (say, new casinos are built and slot machines are added at existing pari-mutuels) minus the social costs of gambling currently, with the current status of legal/illegal gambling in the state. The marginal social costs due to a particular policy change then depend largely upon how one views the relationship between the prevalence of problem gambling and the expansion of legal gambling options in a jurisdiction. We discuss this issue next.

d. Degree of Gambling Expansion and Social Cost Estimates

Psychologists have estimated the prevalence of gambling disorder in a variety of jurisdictions and over a wide variety of time periods. Recent estimates suggest that the past-year prevalence rate of pathological/problem gambling ranges from 0.15 percent to 4.7 percent in the general adult population,³³⁰ with lifetime prevalence established at between 0.4 percent and 2.0 percent.³³¹ This rate is observed to have remained relatively stable despite the dramatic proliferation of casinos within the United States.^{332, 333} This suggests there is not a direct, or at least linear, relationship between gambling availability and the prevalence of gambling disorders. We discuss several studies that have focused on this issue in particular.

³³⁰ Stephanie Stuckie and Margret Rihs-Middel, “Prevalence of Adult Problem and Pathological Gambling between 2000 and 2005: An Update,” *Journal of Gambling Studies*, Volume 23, 2008, p. 245-257.

³³¹ Nancy M. Petry, Frederick S. Stinson, Bridget F. Grant, “Comorbidity of DSM-IV Pathological Gambling and Other Psychiatric Disorders: Results from the National Epidemiological Surveys on Alcohol and Related Conditions,” *Journal of Clinical Psychiatry*, Volume 66, 2005, p. 564-574.

³³² Donald W. Black, Brett McCormick, Mary E. Losch, Martha Shaw, Gene Lutz and Jeff Allen, “Prevalence of Problem Gambling in Iowa: Revisiting Shaffer’s Adaptation Hypothesis,” *Annals of Clinical Psychiatry*, Volume 24, 2012, 279-284.

³³³ Robert J. Williams, Rachel A. Volberg, and Rhys M.G. Stevens, *The Population Prevalence of Problem Gambling: Methodological Influences, Standardized Rates, Jurisdictional Differences, and Worldwide Trends*. Guelph, Ontario, Canada: Ontario Problem Gambling Research Centre and Ontario Ministry of Health and Long Term Care.

As we mentioned earlier in the section on gambling exposure, the paper by Shaffer, LaBrie and LaPlante³³⁴ develops a “regional exposure model” (“REM”) to examine the relationship between gambling availability and gambling disorder. Regional exposure considers dose, potency and duration of gambling availability. The researchers also devised a Regional Index of Gambling Exposure (“RIGE”), which standardizes available data on dose, potency and duration of gambling availability as scores, and then combines the scores to yield a standardized scale score of regional gambling availability. The purpose of the RIGE is to allow for the ordering of jurisdictions along a continuous gradient and test assumptions about correlations between regional gambling availability and prevalence of pathological/problem gambling.³³⁵

The Shaffer et al. analysis of county-level data for the state of Nevada reveals that, when comparing counties with higher RIGE scores to those with lower scores as groups, the prevalence of pathological and problem gambling is higher in counties with higher RIGE scores.³³⁶ The researchers note, “Individuals who already have problems might be attracted to the gambling-exposed areas” (p. 45), among other potential complications with the analysis. Nevertheless, their analysis suggests there is some relationship between the availability of legal gambling and problem/gambling disorder at a county level.

Another contribution of this paper is that it discusses a “social adaptation model,” which suggests that the novelty of new gambling opportunities might temporarily increase gambling and gambling problems, but that people adapt to the change and gambling and problem gambling eventually decline toward a more stable base level.³³⁷

We also have mentioned Welte et al.³³⁸ earlier. This research examined various demographic, ecological and social-risk factors that might potentially explain problem gambling prevalence. They found that, for people more than 30 years old, risk for the number of casinos available within 10 miles positively predicted the presence of a gambling problem. However, there was no such relationship for people under 30 years old. Of importance, the authors noted that the non-significant relationship between casino proximity and problem gambling for individuals under 30 was not explained by a more restricted set of potential opportunities for

³³⁴ Howard J. Shaffer, Richard A. LaBrie and Debi LaPlante, “Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Considering the Case of Legalized Gambling as a Public Health Toxin,” *Psychology of Addictive Behaviors*, Volume 18, 2004, p. 40-48.

³³⁵ *Ibid.*, p. 43.

³³⁶ *Ibid.*, p. 45.

³³⁷ Howard J. Shaffer, Richard A. LaBrie and Debi LaPlante, “Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Considering the Case of Legalized Gambling as a Public Health Toxin,” *Psychology of Addictive Behaviors*, Volume 18, 2004, p. 42.

³³⁸ John W. Welte, Grace M. Barnes, William F. Wiczorek, Marie-Cecile O. Tidwell and Joseph H. Hoffman, “Types of Gambling and Availability as Risk Factors for Problem Gambling: A Tobit Regression Analysis by Age and Gender,” *International Gambling Studies*, Volume 7, 2007, p. 183-198.

casino wagering amongst younger individuals or enforcement of legal age limits. Analyses revealed that proximity to casinos similarly had no relationship to the gambling problems of respondents aged 21-29 or respondents aged 18-20.³³⁹

Finally, the study by Sévigny et al. suggests that the geographical proximity of casinos is positively related to casino gambling participation and expenditure, but does not affect the past-year prevalence rate of probable gambling disorder or problem gambling. However, results from this study should be interpreted with caution. It remains unclear whether the non-significant relationship between casino proximity and gambling problems for this sample is an artifact of respondents' gambling activity preferences (i.e., casino games may not be the main or only gambling activity for individuals with gambling problems in the study's sample).³⁴⁰

Of course, there are other studies that have examined the relationship between casino proximity (or gambling availability) and the prevalence of disordered gambling. Different studies suggest different conclusions, and it is not obvious that there is a direct, linear relationship between gambling availability and the prevalence of gambling problems.

In the case of Florida, which currently has several casinos and pari-mutuel gambling throughout the state, it is unclear how exactly an expansion of gambling availability would affect the prevalence of problem gambling and gambling disorder. Based on our review of the literature, it is possible that new gambling venues would be related to a temporary increase in prevalence, however, if the new gambling venues were to be in areas that already have existing gambling venues, then the effect could be minimal.

There is no scientific mechanism for estimating how the prevalence of gambling problems is likely to change as a result of potential policy changes. Yet we could posit a change in the prevalence rate of gambling disorder if we wish to consider how cost estimates would vary based on prevalence rate changes. We will address this issue later in this section of the report.

e. Cause of Gambling Problems: Gambling Availability or Mental Illness?

While trying to determine the likely impacts of expanded gambling opportunities on the prevalence of gambling disorder, and in turn, on the estimated social costs of gambling related to expanded gambling opportunities, one must consider the relationship between gambling and gambling problems. Why do people develop gambling problems? Is it fundamentally because of an increase in the availability of gambling or the types of gambling available? Or is it more based on the fact that gambling problems are a symptom of a more fundamental mental illness?

³³⁹ Ibid., p. 193.

³⁴⁰ Serge Sévigny, Robert Ladouceur, Christian Jacques and Michael Cantionotti, "Links Between Casino Proximity and Gambling Participation, Expenditure, and Pathology," *Psychology of Addictive Behaviors*, Volume 22, 2008, p. 295-301.

In other words, do gambling machines make people addicted, or is gambling addiction a symptom of some more basic mental illness? The answer to this question, which is still under debate in the scientific literature, would have a large impact on how much we should expect the expansion of legal gambling options in Florida to affect the prevalence of gambling disorder and related disorders.

Although we do not have a concrete answer to this question, the social adaptation model discussed above suggests that this issue may not have a large long-term impact on our analysis.

7. Gross versus Net Social Costs

Most studies that address the social costs of gambling disorder only focus on the cost side of the ledger. Similarly, economic studies that address the employment or tax impacts of legalized casino gambling often do not consider the costs of gambling. In this section, we briefly discuss some of the potential social benefits of expanded casino gambling. In many cases, these benefits are not acknowledged or measured by researchers seeking to inform the debate over cost-side of casino expansion.

The benefits of legalized casinos that are usually acknowledged by researchers and politicians have to do with employment. When a new casino is built, it generates temporary construction jobs. Then the operation of the casino is obviously labor-intensive; casinos typically have a large number of employees. Along with the jobs, it should be noted, come other benefits for the workers. For example, if casinos provide health insurance, then this would represent a significant social benefit. This is because the insurance would help enable the employee and his/her family to afford more and better health care, which has obvious benefits to society.

Expanded gambling has other potentially beneficial impacts for a local economy. For example, the increased demand for employees in the labor market, caused by the opening of a casino, would tend to put upward pressure on wages in the local economy. While this would benefit workers in the area, it also could put upward pressure on prices, which would negate some of the benefit of the higher wages.

Among the other benefits from gambling expansion would be the consumer benefits that accrue to those who enjoy gambling. When consumers receive a new entertainment option, it improves their well-being. More competition among entertainment firms also may push prices down and quality higher, which also benefits consumers.

These are just some of the potential social/economic benefits of the expanded gambling industry. These benefits would offset some of the social and economic costs of gambling disorder. Yet some of these impacts are rarely considered in the literature. Indeed, it is rare to find a single study that simultaneously considers both the cost- and benefit-side of the ledger. For this reason, little is known about the *net social costs* of gambling disorder. After considering the social benefits that may be attributable to legalized gambling, these costs may be lower than implied in social cost studies from the literature.

Despite the lack of data, some authors have speculated on the net impact (social and economic) of legalized gambling and casinos, in particular. For example, Grinols claims that the “costs of problem and gambling disorder versus the benefits of casino expansion...range from 3.9:1 to 6.3:1.”³⁴¹ Yet, Walker has argued that Grinols’ figure is flawed because he discounts consumer benefits from casino expansion and overstates the social costs of gambling.³⁴² Walker argues that the casinos probably generate more social and economic benefits than costs, although he acknowledges not all of these can be precisely (or even generally) measured.³⁴³ One can, of course, find other opinions on the matter.

One thing that should be easy to agree on is that no one knows for certain the net social and economic costs and benefits of legalized gambling. It is, therefore, an enormous challenge to attempt to estimate the marginal impact of the expansion of casino or other forms of gambling. Yet we attempt to provide a range of reasonable estimates in the next section.

8. Social Costs: An Economic Illustration

In this section, we will discuss monetary estimates of the social costs of gambling disorder in more detail and offer an estimated range of social costs of gambling that might apply to Florida. It should be noted at the outset that we are not collecting primary data; in fulfillment of Florida’s request, we will be discussing estimates that have already been published in the literature. The reason we do not attempt to develop an original social cost estimate for this study is that there are fundamental problems with this line of research that, in our opinion, renders such estimates speculative and largely arbitrary.³⁴⁴

Among the studies from which cost estimates were listed earlier in this section, the social cost of gambling disorder estimates ranged from \$9,469 to \$53,000 per pathological gambler per year. Yet among these, in our judgment, Thompson, Gazel and Rickman (1997) and Thompson and Schwer (2005) do the best job in explaining how their cost estimate was calculated. Both studies rely on survey responses from Gamblers Anonymous members and, therefore, probably overstate the actual social costs of the average pathological gambler, as discussed above. There is also some reason to believe that GA members in Las Vegas might have relatively serious gambling problems, say compared to Wisconsin GA members (from the 1997 study). We therefore choose to focus on the Thompson, Gazel and Rickman study as a starting point for developing a range of social cost estimates.³⁴⁵ We recognize that this study provides one of the

³⁴¹ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004), p. 178.

³⁴² See Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 23, 180.

³⁴³ Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 2, 261.

³⁴⁴ The most obvious problem, discussed above, is how to deal with the comorbidity problem.

³⁴⁵ William N. Thompson, Ricardo C. Gazel and Dan Rickman, “Social and legal costs of compulsive gambling,” *Gaming Law Review*, Volume 1, 1997, p. 81-89.

lowest social cost studies in the literature. However, we view the transparency of this study, relative to most others, to be critical in being able to suggest a reasonable social cost range to be applied to Florida.

Below we again reproduce the summary table from the Thompson et al. paper, which shows the different components they include in their social cost estimate of \$9,469 per pathological gambler per year. In the sections below, we discuss the economic perspective on social costs, and how the Thompson et al. estimate would be adjusted, to account for the economic perspective. We also examine the issues of wealth transfers and externalities. Finally, we provide a range of social cost estimates for Florida based on these various considerations.

Figure 107: Estimated annual Florida social costs of gambling, per disordered gambler

Employment		\$2,941
Lost work hours	\$1,329	
Unemployment compensation	214	
Lost productivity/unemployment	1,398	
Bad debts		1,487
Civil court		848
Bankruptcy court	334	
Other civil court	514	
Criminal justice		3,498
Thefts	1,733	
Arrests	48	
Trials	369	
Probation	186	
Incarceration	1,162	
Therapy		361
Welfare		334
Aid to Dependent Children	233	
Food stamps	101	
Total		\$9,469

Source: Thompson, et al., 1997, p. 87.

a. The Economic Perspective

As explained above, economists have a particular way of defining “social cost.” This definition was first explained in the context of gambling by Walker and Barnett in 1999.³⁴⁶ The social cost of an action was defined in that paper as “the amount by which that action reduces aggregate societal real wealth” (p. 185). This definition was discussed in more detail in a previous section. Basically, from an economic perspective, social cost does not include transfers of wealth (i.e., amounts that are simply transferred from one person or group to another) or costs that are “internalized” (i.e., are borne by the pathological gambler him-/herself, or someone with whom that person has a voluntary financial relationship). The economic definition of social cost also makes a distinction between types of “externalities.” Externalities are third-party effects and, generally, what many observers have in mind when they think of “social cost.” We will discuss externalities in more detail below.

We can compare the economic perspective on social cost with one other definition of social cost, already discussed earlier. The paper by Thompson, Gazel and Rickman offered a social cost definition, apparently in reaction to the conference paper by Walker and Barnett, which was subsequently published in 1999. In their 1999 paper, Thompson et al. define social cost as:

costs that the gambler imposes upon people who are not participating in the gambling process as a result of his or her gambling and gambling related activities. The social costs of gambling are burdens that the gambler imposes on others. Others would not have these

³⁴⁶ Douglas M. Walker and A.H. Barnett, “The Social Costs of Gambling: An Economic Perspective,” *Journal of Gambling Studies*, Volume 15, 1999, p. 181-212.

burdens if the individual were not participating in gambling activities. (p. 3; emphasis in original)

From this definition, and from the items measured and included in their social cost estimates in various studies³⁴⁷ we can infer that these researchers believe that social costs can and should include transfers of wealth as well as pecuniary externalities. We will discuss how the different perspectives on social cost treat different items in the following sections.

We begin with the Thompson et al. (1997) social cost estimate of \$9,469. We consider how an economics definition of social cost would affect their cost estimate. For this discussion, we reproduce Walker and Barnett's analysis (1999, p. 198-202), which basically follows the table of costs listed by Thompson et al.

The first item is the value of lost work hours, unemployment compensation and lost productivity/unemployment. Unemployment compensation is a government program that transfers wealth from taxpayers to benefits recipients and, hence, it is a transfer of wealth that would not be included as a social cost of gambling from an economic perspective. The lost work time and associated payment would not be a social cost, as the worker ultimately loses this money. Not getting paid for not working should not be considered a social cost, as it simply represents a transaction for labor that does not occur. The final subcategory under "Employment" is lost productivity. To the extent that the employer pays the worker for work that is not done or for hours during which the worker is less productive than normal, then the employer bears this cost. Because the labor contract is between these two people (the employee and employer), any costs imposed by one on the other are borne by actors to the transaction. Therefore, there is no "social" aspect to this cost. If the employer does not fire the employee for reduced productivity, then it is the employer who bears the cost – and this is a voluntary transaction between the two. Then the \$2,941 for lost work productivity would not be considered a social cost from an economic perspective.

The next group of items is "bad debts," or amounts of money pathological gamblers borrowed but did not pay back. Although this is certainly bad for creditors, it is offset by the gain to the debtor. Thus, bad debts are a wealth transfer from an economic perspective and do not belong in social cost estimates. The \$1,487 would therefore be deducted from the Thompson et al. social cost estimate.³⁴⁸

Both types of civil court costs would represent social costs of gambling disorder, so that their estimated combined value of \$848 would be a social cost. Under the heading of "criminal justice," all of the items except "thefts" would be included in social costs, from an economic perspective. This includes arrests, trials, probation and incarceration. The total amount for these

³⁴⁷ Thompson et al. (1997, 1999) and Thompson and Schwer (2005) are examples.

³⁴⁸ Walker and Barnett (1999, p. 200) do note that the resources used in an attempt to collect bad debts would be considered a social cost, since these represent resources that cannot then be used for other means of production in society.

is \$1,765. Theft is not included because it is a wealth transfer, and the money stolen does not cease to exist.

Therapy for pathological gamblers, which Thompson et al. value at \$361, would be considered a social cost because, in the absence of gambling disorder, the therapy would presumably not be needed and because the resources now cannot be used to produce something else instead.

The welfare costs both represent wealth transfers and, thus, should be excluded from the social cost estimate. Aside from this, one could argue that these costs are costs of government policy, in general, not of gambling disorder, in particular. In addition, it would also need to be shown that these expenses would not be incurred in the absence of the gambling problem.

When we total up the costs that remain under an economics conception of social cost, we have a total of \$2,974 per disordered gambler annually. Yet this number is itself certainly flawed, for several reasons that also apply to the original Thompson et al. social cost estimate:

- It assumes the Gamblers Anonymous members have no co-existing disorders (i.e., there is no comorbidity) that should be attributed some of the measured social costs.
- It assumes that the GA members correctly and honestly completed the survey instrument.
- It fails to consider a number of social costs that exist, but that are unmeasurable, such as divorce, suicide attempts and other negative social impacts.
- It assumes that GA members are representative of pathological gamblers, in general.

Despite these problems, as noted earlier, the Thompson et al. social cost estimate is probably the best from which to start because it is at least transparent in what is being measured, and how. Most other studies are not nearly so clear in this regard. Returning again to the study by Thompson and Schwer (2005), we note that similar adjustments for internalized costs and transfers would reduce the social cost estimate for Las Vegas pathological gamblers from \$19,711 to about \$1,579 per pathological gambler per year.³⁴⁹

We will use the adjusted social cost estimate of \$2,974 (from Walker and Barnett, 1999) as a base social cost estimate for the application to Florida.

³⁴⁹ Douglas M. Walker, "Clarification of the Social Costs of Gambling," *Journal of Public Budgeting, Accounting & Financial Management*, Volume 20, 2008, p. 147.

b. Including Transfers

As has been noted before, there has been a lot of debate in the literature over the proper treatment of wealth transfers in social cost analyses. Most researchers seem to agree with Walker and Barnett, that transfers should not be included as social cost estimates.³⁵⁰ However, if we ignore the economists on this issue and decide to include wealth transfers in social cost estimates, then our social cost estimate would increase by \$3,768 and become \$6,742, based on the estimated impacts by Thompson et al. (1997). In particular, we would include in the estimate these additional items: bad debts, unemployment compensation, thefts and welfare (Aid to Dependent Children and food stamps).

Again, we should mention the objections economists have to including transfers of wealth. If these are included, then ordinary transactions could just as well be included in social cost estimates. For example, Politzer, Morrow and Leavey's (1985) concept of "abused dollars," which could be interpreted as the amount of money bet gambling, could be included in social cost estimates, since it represents money put at risk. However, we believe the concept of social cost quickly loses its value once wealth transfers are included in the estimation.

c. Accounting for Externalities

The concept of "externalities" comes from the public economics literature. Basically, an externality is a third-party effect of an act or transaction. For example, if a person smokes a cigarette in a restaurant and the smoke bothers other patrons in the restaurant, the smoker is creating a negative consumption externality. A factory that produces cars is engaged in a private market transaction with car buyers. Yet, if the factory emits air pollution and the smoke damages neighbors of the factory who happen to be down-wind, then economists call this a negative production externality. In both examples, the parties to the transaction (restaurant owner and smoking patron; car buyer and car factory owner) fail to consider the costs that their action or transaction imposes on others in society.

These third-party effects are externalities and their monetary value, if it can be estimated, represents a real cost to society. If the other patrons in the restaurant would be willing to pay a total of \$50 if they could avoid the cigarette smoke during the meal, then this amount would represent the cost of the smoking externality. If the factory smoke causes the factory's neighbors to have to redo their laundry to get it as clean as it would have been in the absence of the factory pollution, at a total cost of \$500, then this would be the social cost of that externality.

What complicates the issue of externalities is that there is one type of externalities that represents a social cost, but there is another type that does not represent a social cost. For example, in the car factory and laundry example above, that does represent a social cost because

³⁵⁰ Sources cited earlier that do not view transfers as social costs include: National Research Council, Federal Reserve Bank of Minneapolis, and researchers including Eadington, Collins & Lapsley, and Single.

the neighbors had to use real resources (i.e., soap, water, laundry machines) in order to re-clean their laundry. Those were resources that could have otherwise been used for other purposes (i.e., to clean additional laundry, rather than re-cleaning laundry), so it represents real resources that are lost to society. Perhaps the best discussion of this rather technical issue is by Baumol and Oates (1988).³⁵¹

Another type of externality is called a “pecuniary externality.” These are also third-party effects, but they tend to affect wealth distribution, say through price adjustments, rather than the real resources available in society. For example, when a new casino opens in a small city, it causes an increase in demand in the local labor market. This pushes the wage rate higher. Then other firms in the city must offer their workers higher wages in order to compete with the casino for workers.³⁵² The higher labor expenses for other firms in the city are certainly costs to those firms that resulted from the opening of the casino. But it only affects labor prices; it does not cause other firms to need to hire more labor, for example, to produce a given amount of product. Even if the higher labor prices push some local firms out of business, it is still considered a pecuniary externality. Externalities that occur only through price adjustments are generally not seen by economists as being particularly important – they are a basic fact in market economics. All sorts of individuals’ actions (on both the supply and demand side of the market) can affect prices. But this does not mean that we should be worried about all such transactions, or that government should be recruited to correct such externalities.

d. Including Internalized Costs

The last category of items included in the Thompson et al. (1997) social cost estimate are costs due to gambling disorder but that are incurred by either the pathological gambler himself/herself or someone else who has entered into a private transaction with the pathological gambler. Examples of such costs that are “internalized” would include bad debts and possibly therapy (if the pathological gambler pays for therapy). The other one would be the employment costs identified by Thompson et al.

Lost work hours and lost productivity would both be costs that are borne either by the employer or employee and, therefore, are not social costs. If the employee does not get paid for lost work hours and if the employer cuts pay due to poor performance or productivity, then the pathological gambler bears this cost. If the employer does not cut pay, then the employer bears the cost – voluntarily by continuing to employ the pathological gambler who is not performing up to expectations.

³⁵¹ William J. Baumol and Wallace E. Oates, *The Theory of Environmental Policy*, 2nd edition (New York, NY: Cambridge University Press, 1988), chapter 3, and especially p. 30. Walker (*Casinonomics*, 2013, p. 159-161) presents their analysis in less technical terms.

³⁵² In the example, we are assuming no (or minimal) unemployment. The more unemployment there is, and the more of these people hired by the casino, the opening a casino would reduce pressure on demand and wages.

Unemployment compensation would be treated similar to the “Welfare” items of Aid to Dependent Children and food stamps. These are government programs and may be better classified as costs of government policies, rather than the social costs of gambling.³⁵³

If we were to include costs that are internalized by either the pathological gambler or parties who voluntarily agreed to enter into a transaction with him/her, then we would add \$2,727 to the social cost estimate (lost work hours plus lost productivity/unemployment). Our new total would be \$9,468, the amount originally estimated by Thompson et al. (1997).

Finally, it is worth noting that we could also consider “bad debts” to be an internalized cost. Yet, it is also a simple wealth transfer, as discussed above. So bad debts could be included in either category.

e. Estimate for Problem Gamblers

The Thompson et al. (1997) social cost estimate was based on individuals who were members of Gamblers Anonymous, and may therefore be expected to have relatively serious gambling problems. It is safe to assume that most of the individuals would qualify as pathological gamblers. A less serious category of gambling problem is called “problem gambler.”

One of the diagnostic tools for gambling problems is the American Psychiatric Association’s *DSM-IV*, which recently has been updated to *DSM-V*. This is discussed elsewhere in this report. There are 10 *DSM-IV* criteria that are used to classify people with a gambling-related disorder. Problem gamblers would satisfy three to four or fewer criteria from the *DSM-IV*, while pathological gamblers would be characterized by five or more *DSM-IV* criteria.³⁵⁴

Since the Thompson paper offered only an estimate for “compulsive gamblers,” which we are assuming were pathological gamblers, we also need a cost estimate for problem gamblers. We would, of course, expect the social costs attributable to problem gamblers to be less serious than for pathological gamblers. Ideally, Thompson et al. would have segmented their sample into problem gamblers and pathological gamblers. Since that was not done, we must produce a social cost estimate for problem gambling in another way. Although the studies Grinols cites have a variety of problems, the advantage of looking to Grinols in this case is that he does survey several different studies, some of which estimate costs for problem gamblers. Rather than re-estimating our cost using one of those other studies from Grinols’ survey, we opt to take the average social cost estimate for problem gamblers as a proportion of the estimate for pathological gamblers. Grinols notes that the average social cost for problem gamblers was

³⁵³ Browning (1999) calls such government programs “fiscal externalities.” These do not produce economic inefficiencies (or social costs). See Edgar K. Browning, “The Myth of Fiscal Externalities,” *Public Finance Review*, Volume 27, 1999, p. 3-18.

³⁵⁴ Two other categories are specified. “At-risk” gamblers endorse 1-2 DSM criteria. “Low-risk” individuals endorse none of the DSM criteria.

\$2,945, while it was \$10,330 for pathological gamblers. Then his estimated cost for problem gamblers is about 30 percent of the cost of pathological gamblers. We use this proportion to derive our social cost estimates for problem gambling.³⁵⁵

f. Summary of Social Cost Estimates

We can now summarize the per-person *annual* estimated social costs, based on our different social cost definitions, and by adjusting the gambling disorder estimate to produce the problem gambling estimate. Recall that we had three different estimates for the social costs of gambling disorder. The basic economics estimate of social costs would be \$2,974. If we add transfers of wealth to the estimate, it becomes \$6,742. If we include costs that are internalized, then the estimate becomes the \$9,469 estimated by Thompson et al. (1997). In order to get the estimated costs for problem gamblers, we multiply each of the above numbers by 30 percent. The different definitions and associated social cost estimates are summarized in the table below. For reasons discussed earlier, we believe the estimates based on the economics definition of social cost are the most accurate among the estimates considered here. We have highlighted those data in the table.

Figure 108: Estimated social costs, per disordered/problem gambler, per year

Social Cost Definition	Pathological Gambler	Problem Gambler
Economics (excludes transfers and internalized costs)	\$2,974	\$ 892
Economics definition, plus transfers	\$6,742	\$2,023
Economics definition, plus transfers and internalized costs	\$9,469	\$2,840

Source: Spectrum Gaming Group summary

g. A Range of Gross Social Cost Estimates for Florida

Next, we use these estimated values to develop total gross social cost estimates (i.e., estimates that do not consider benefits) for Florida. Our base social cost estimate comes from an economics definition of social cost, using the numbers provided by the Thompson et al. study. We can make adjustments to it based on how we wish to define “social cost” or, more to the point, depending on what types of impacts we wish to include in the estimate.

We have one final distinction to make before presenting the various estimates. Psychologists have found that the prevalence of problem and pathological gambling varies, depending on how far back one looks at symptoms. For example, those who report their symptoms of pathological gambling occurred during the past year are called “past-year problem

³⁵⁵ This is clearly not an ideal way of deriving the cost estimate for problem gamblers. But if we wish to keep using the Thompson et al. (1997) social cost estimates, then we must adapt problem gambling cost to that study.

gamblers.” Those who report the symptoms have occurred sometime during their life but not necessarily only in the past year are called “lifetime pathological gamblers.”

A study of Florida estimated the prevalence rates listed in the table below.³⁵⁶ We have highlighted the categories that are assumed to be the source of many of the social costs of gambling (problem and pathological gamblers). The different categories are based on how many of the 10 DSM-IV categories are endorsed by the individual.

Figure 109: Past-year and lifetime Florida prevalence rates

Past-Year	% of General Population
Low-risk (no criteria)	66.0%
At-risk (1-2 criteria)	4.0%
Problem (3-4 criteria)	0.5%
Pathological (5+ criteria)	0.3%
Lifetime	% of General Population
Low-risk (no criteria)	82.2%
At-risk (1-2 criteria)	6.9%
Problem (3-4 criteria)	0.5%
Pathological (5+ criteria)	0.5%

Source: Shapira, et al. (2002)

We will use these prevalence estimates to provide a variety of social cost estimates for Florida. It should be noted that the expansion of legal gambling options in the state might be expected to cause a modest and temporary increase in prevalence rates. However, these would be expected to fall back in line with the rates listed above, after some time. This expectation is based on the social adaptation model.³⁵⁷ We therefore assume that the prevalence rates would remain roughly the same even with expanded legalized gambling in Florida.

The Census Bureau³⁵⁸ estimates the 2012 population of Florida at 19,317,568. We use this figure, along with the prevalence rates in the table above and the different social cost estimates, to provide a range of cost estimates for Florida.

For each gambling disorder category (i.e., problem gambling and pathological gambling), we provide a gross social cost estimate for each of the three definitions of social cost discussed earlier (i.e., economics definition; add wealth transfers; add internalized costs), given the 2012 population of Florida. We provide the cost table twice, once for past-year prevalence estimates

³⁵⁶ Nathan A. Shapira, Mary Ann Ferguson, Kimberly Frost-Pineda and Mark S. Gold, “Gambling and Problem Gambling Prevalence among Adolescents in Florida: A Report to the Florida Council on Compulsive Gambling, Inc.” 2002. Available at http://dSPACE.ualgary.ca/bitstream/1880/49261/1/Gambling_Adolescents_Florida_2002.pdf (Accessed August 8, 2013).

³⁵⁷ Howard J. Shaffer, Richard A. LaBrie, and Debi LaPlante, “Laying the Foundation for Quantifying Regional Exposure to Social Phenomena: Consider the Case of Legalized Gambling as a Public Health Toxin, *Psychology of Addictive Behaviors*, Volume 18, p. 42.

³⁵⁸ <http://quickfacts.census.gov/qfd/states/12000.html> (Accessed August 7, 2013)

and one for lifetime prevalence estimates. Thus, we use the information from the above two tables, along with the population estimate, to calculate the data in the following two tables.

Figure 110: Gross social cost estimates for Florida past-year prevalence estimates

Definition	Pathological Gamblers	Problem Gamblers	Total Estimated Cost
Economics	\$172,351,000	\$ 86,156,000	\$258,507,000
Economics + transfers	\$390,717,000	\$195,397,000	\$586,114,000
Economics + transfers + internalized costs	\$548,754,000	\$274,309,000	\$823,063,000

Source: Spectrum Gaming Group summary. All amounts are rounded to the nearest \$1,000.

Figure 111: Gross social cost estimates for Florida lifetime prevalence estimates

Definition	Pathological Gamblers	Problem Gamblers	Total Estimated Cost
Economics	\$287,252,000	\$ 86,156,000	\$ 373,408,000
Economics + transfers	\$651,195,000	\$195,397,000	\$ 846,592,000
Economics + transfers + internalized costs	\$914,494,000	\$274,309,000	\$1,188,803,000

Source: Spectrum Gaming Group summary. All amounts are rounded to the nearest \$1,000.

The range of estimates is, for social costs based on past-year problem and pathological gambling, between \$258 million and \$823 million per year. For lifetime problem and pathological gambling, social costs are estimated at between \$373 million and \$1.19 billion per year. Based on our earlier discussion regarding the definitional and measurement issues, we believe the “best” estimates to be the economics definition-based estimates of \$258 million (past-year) and \$373 million (lifetime). These estimates are highlighted in the summary tables. It should be emphasized that these are gross costs, not net. That is, these estimates do not take into account the potential social benefits from legalized gambling.

Earlier we argued that the increased availability of gambling, say because new casinos are built or slot machines are added to existing pari-mutuels across Florida, might cause a temporary increase in the prevalence of problem and pathological gambling. However, as suggested by the social adaptation model, we would expect that the rates would fall back to close to their original level after some time. If one wished to adjust the monetary estimates of social costs to account for this temporary increase in prevalence, the monetary values could simply be adjusted by the expected increase in prevalence. For example, if we are using the economics definition of social cost for past-year social costs, and we believe that the year after gambling is expanded the prevalence of both problem and pathological gambling would increase 20 percent, then we can simply multiply the \$258 million figure from Figure 110 by 1.2 to arrive at the new social cost estimate with increased prevalence.

This adjustment is simple, and it is also arbitrary. In the gambling literature there is no good methodology for estimating the likely temporary increase in prevalence of gambling disorders. However, we view this issue as relatively unimportant, since presumably, whatever information social cost estimates provide to policymakers would be used for making a long-term decision about gambling policy. We would not expect such data to be useful at informing a very short-term policy change, as the short-term change in prevalence adds another unknown to an already highly arbitrary area of inquiry (social cost estimation).

Finally, we should re-emphasize the potential problems with these monetary estimates that were highlighted above (figures 86-87). We believe it would be irresponsible or possibly even deceptive for a person to quote the gross social cost estimates provided here without also acknowledging some of the potentially serious problems we have indicated above (i.e., comorbidity, unmeasurable costs being excluded, estimates based on GA survey respondents). Because of the highly arbitrary methodology for deriving these estimates, and because of the definitional issues discussed above, one should not have too much confidence in the accuracy of the estimates provided. Indeed, one problem with providing specific estimates for a number that is essentially unknowable is that it creates a false sense of precision. That is, since a precise monetary estimate (or even a narrow range of estimates) is being provided, it may give the impression that the numbers were derived through a highly scientific and refined process. This is certainly not the case for social cost of gambling estimates either here or anywhere else in the literature. This should be clearly understood by anyone using social cost estimates to inform opinion or policy on gambling.

Despite all of these concerns, one could argue that the use of some social cost estimate is better than no estimate; after all, social costs exist. Perhaps the errors in measurement are about equally distributed on both sides (below and above) of the true value of the social costs of gambling. In any case, the social cost estimates we provide here are but one possible measure of the social costs associated with problem and gambling disorder. Other researchers could produce estimates that are very different from ours.

Concluding Thoughts

Social impacts associated with gambling expansion can take many forms. In this chapter, we presented an evidence-based discussion related to exposure- and expansion-related gambling, gambling problems, crime and social costs. Although the presence of these issues are well-known and readily acknowledged by the vast majority of interested observers, whether and to what extent these problems are specifically the result of gambling expansion remains to be determined. Although it is a recurring theme, it is worth repeating that, absent the necessary prospective longitudinal research, it is not possible to determine with confidence whether expanded gambling specifically leads to, for example, more crime, mental disorder and other social problems.

Popular opinion suggests that more gambling opportunities will translate into commensurate gambling problems. However, the scientific literature suggests that the relationship between gambling, expanded gambling and gambling exposure is not so straightforward. As we described previously, the prevalence of gambling disorders has remained relatively steady from the middle 1970s to the present. Some observers would argue that the rate actually has declined. At the very least, the current evidence reveals that the rate of gambling disorder in the United States is about the same as it was prior to the dramatic expansion of gambling. The relatively steady prevalence rate of disordered gambling suggests that factors

other than expanded gambling are the primary influences on the extent and course of the disorder among the community.

Because gambling has become ubiquitous and perhaps saturated community exposure, further expansion of gambling is not likely to have the same impact as the original expansion of gambling when many fewer people experienced new exposure to gambling opportunities. One of the reasons for the limited enduring impact of expanded gambling on previously exposed communities is that people adapt to the presence of gambling. It is becoming clearer that exposure and adaptation are countervailing forces that engage when gambling expansion commences. Consequently, the short-term impacts of gambling expansion vary from the long-term impacts. Even when gambling expansion stimulates increased levels of gambling and gambling involvement, people adapt to the presence of gambling and the overall rate of gambling disorder tends to remain relatively stable. This stability suggests that most people have resistance to the presence of gambling. Unfortunately, less than 1 percent of the community is vulnerable to excessive gambling – perhaps because of preexisting disorders (e.g., anxiety, personality, etc.) that tend to occur at a steady rate regardless of gambling expansion. Ideally, prospective longitudinal research will illuminate the relationship between gambling expansion and important outcomes (e.g., gambling, gambling problems), as well as the course of these consequences.

1. Extant Scientific Literature and Gambling Expansion

There is little available scientific evidence suggesting that gambling expansion has stimulated gambling-related problems except for “virgin” gamblers, and even they seem to adapt to the presence of gambling. There are other vulnerable segments of the population that are susceptible to adverse consequences from gambling and other activities (e.g., drinking alcoholic beverages) that are capable of shifting their undesirable subjective state in a desirable direction – even if only temporarily. However, overall, there is little research showing that gambling expansion has changed the prevalence of gambling-related problems. Nevertheless, the body of research focusing on gambling expansion is limited both by its size and its quality. The implications of a small body of weak research is the need for a high-quality longitudinal prospective study. In addition, we need to be mindful of two possibilities – that gambling is related to gambling-related problems as conventional wisdom might suggest, and that gambling-exposed settings have adapted by developing sufficient immunity to gambling that gambling expansion has little impact.

2. Estimating Gross Social Costs

As we have mentioned, the identification of a specific social cost of gambling expansion is entirely dependent upon the operational definition of social cost. To date, the experts in this area have not come to an agreement about a gold standard for defining social cost. In fact, the extent of expert disagreement in this area of research is quite profound. As we noted, the

National Research Council³⁵⁹ summarized that state of the field in its final report by reminding us that most economic analyses reported in the literature is methodologically weak. Fundamentally, these studies are little more than a crude accounting, bringing together readily available numbers from a variety of disparate sources. In the area of gambling, pathological gambling and problem gambling, systematic data are rarely to be found, despite the ongoing pressure for such information. The consequence has been a plethora of studies with implicit but untested assumptions underlying the analysis that often are either unacknowledged by those performing the analysis, or are likely to be misunderstood by those relying on the results. Not surprisingly, the findings of rudimentary economic impact analyses can be misused. Consequently, the best evidence-based discussion offered must include a range of options that cover the breadth of possible definitions and assumptions available.

For Florida, the range of estimates is, for gross social costs based on past-year problem and disordered gambling, between \$258 million and \$823 million per year. For lifetime problem and disordered gambling, social costs are estimated at between \$373 million and \$1.19 billion per year. Despite the considerable array of economic information and the observation that much of it is weak, some definitions, arguably, are more firmly rooted in well-accepted economic traditions than others are. We suggest in this chapter that an economics perspective, one in which wealth transfers and internalized costs are excluded from the calculation of social costs, provides the most reasonable expectation for short-term post-expansion, pre-adaptation gross social costs in Florida. This means, given Florida's population, we believe the "best" estimates to be the economics definition-based estimates of \$258 million (past-year) and \$373 million (lifetime).

3. What We Know about Florida Gambling Expansion

The amount of gambling already available to Floridians is extensive. Specifically, Florida currently offers multiple venues of various types including:

- 8 Indian casinos (7 Seminole, 1 Miccosukee)
- 1 state lottery, the nation's second-largest as measured by FY 2011 sales excluding VLTs
- 27 pari-mutuel facilities (plus intertrack at Ocala),³⁶⁰ including:
 - 24 with active cardrooms
 - 14 with live greyhound racing

³⁵⁹ National Research Council, *Pathological Gambling: A Critical Review* (Washington D.C.: National Academy Press, 1999).

³⁶⁰ Data from Florida Division of Pari-Mutuel Wagering; July 24, 2012, facilities map and fiscal year-to-date data through March 2013. <http://www.myfloridalicense.com/dbpr/pmw/documents/FACILITIESMAP--Internet-hyperlinks.pdf> and <http://www.myfloridalicense.com/dbpr/pmw/documents/Stats/HandleandCardroom2012-2013--2013-05-13--April--YTD.pdf>.

- 5 with live horse racing (thoroughbred, standardbred, and quarter horse)
- 6 with active jai alai
- 7 with slot machines
- Charitable bingo throughout the state, regulated at a local level.
- Day-cruise vessels and cruise ships that dock at various Florida ports offer unregulated (but not illegal) casino gambling once they reach international waters three miles offshore on the Atlantic side, but 10 miles on the Gulf side.

Further, abutting states also have extensive gambling opportunities that some Florida residents likely patronize, as well. As noted in this chapter, the scientific literature suggests that gambling expansion does not automatically translate into an enduring set of expanded gambling problems. This is especially true for jurisdictions that already have a meaningful amount of gambling opportunities available to their residents. This means that the scenarios that Florida is considering, from minimal to maximal, probably will not have as diverse an impact as they could in a less gambling-exposed jurisdiction.

4. Caveats and Limitations

As with any scientific discussion, undoubtedly, there might be different ways to understand the extant literature associated with gambling and gambling expansion. As we noted, for example, different operational definitions and search engines might yield different literature samples. We want to emphasize that this analysis of the methodological and epidemiological characteristics of gambling-related expansion should be regarded a “first approximation” to summarizing this body of scientific literature while taking into account the methodological quality of studies. Some stakeholders likely will differ with the logic of our coding system. Others might quarrel with our strategy for weighting the methodological characteristics and expansion characteristics of the expansion studies we identified for this review. We considered alternative weighting schemes and, after further thought, determined there would be minimal impact on the outcomes for the alternatives we considered. Miller et al.’s³⁶¹ caveat about his evaluation of the alcohol treatment literature also applies to this project about gambling expansion: despite our multistep “...review process to minimize errors, it is likely that in any project of this size there are over-looked details, and surely judgment calls for specific studies on which reasonable colleagues would disagree” (p. 31). For example, some observers might disagree with our uniform strategy for weighting the methodological features of expansion research studies. Likewise, different social cost definitions always yield different estimates. Consequently, definitive statements remain elusive. Readers should use caution when interpreting the conclusions of this chapter because new findings can shift our understanding of

³⁶¹ William R. Miller et al., “What Works? A Methodological Analysis of the Alcohol Treatment Outcome Literature,” in *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*, ed. R.K. Hester and W.R. Miller (Boston: Allyn and Bacon, 1995).

this youthful field in unexpected directions; these shifts can dramatically change how we interpret the available evidence. Consequently, with prospective longitudinal research, social cost estimates, public health challenges and other gambling-related events might be reinterpreted – either as less or more the result of gambling expansion. Now, the scientific literature simply is not definitive.

Observers might suggest that we are offering too cautious a perspective. We would ask, when does a pound of anecdote yield an ounce of truth? There are many anecdotes that suggest we know more about the impact of gambling and gambling expansion than we do. In this report, we have provided a systematic, science-based guide to understanding gambling and its potential relationship to a variety of social concerns. Maintaining science as our guide sometimes will lead to unexpected directions. For now, we are at an early stage of scientific inquiry regarding the impact of expanded gambling. The available research only offers associative or correlative findings that preclude causal interpretations.

4. Looking Forward

If the State of Florida decides to expand its gambling and wants to track social and economic impact, dynamic prospective longitudinal studies will be necessary to identify changes that occur within the state. Without prospective longitudinal studies, stakeholders are left with a black box of uncertainty about causal influence for many outcomes. Only with prospective research can Florida examine the fundamental elements and origins of social impact (i.e., incidence, course, duration and influence on existing problems).

Appendix I: Analysis of Literature Regarding Social Impacts

One of our primary goals for this report is to provide an original systematic review of literature related to gambling expansion, and the social impacts (in this case, gambling behavior and gambling-related problems) that gambling expansion has on population segments. In this section, we provide a quantitative analysis of selected peer-reviewed and gray literature that we assessed for methodological quality, extent of gambling expansion, and extent of social impact. We then review and discuss this information with respect to the expansion scenarios that Florida is considering.

Procedures

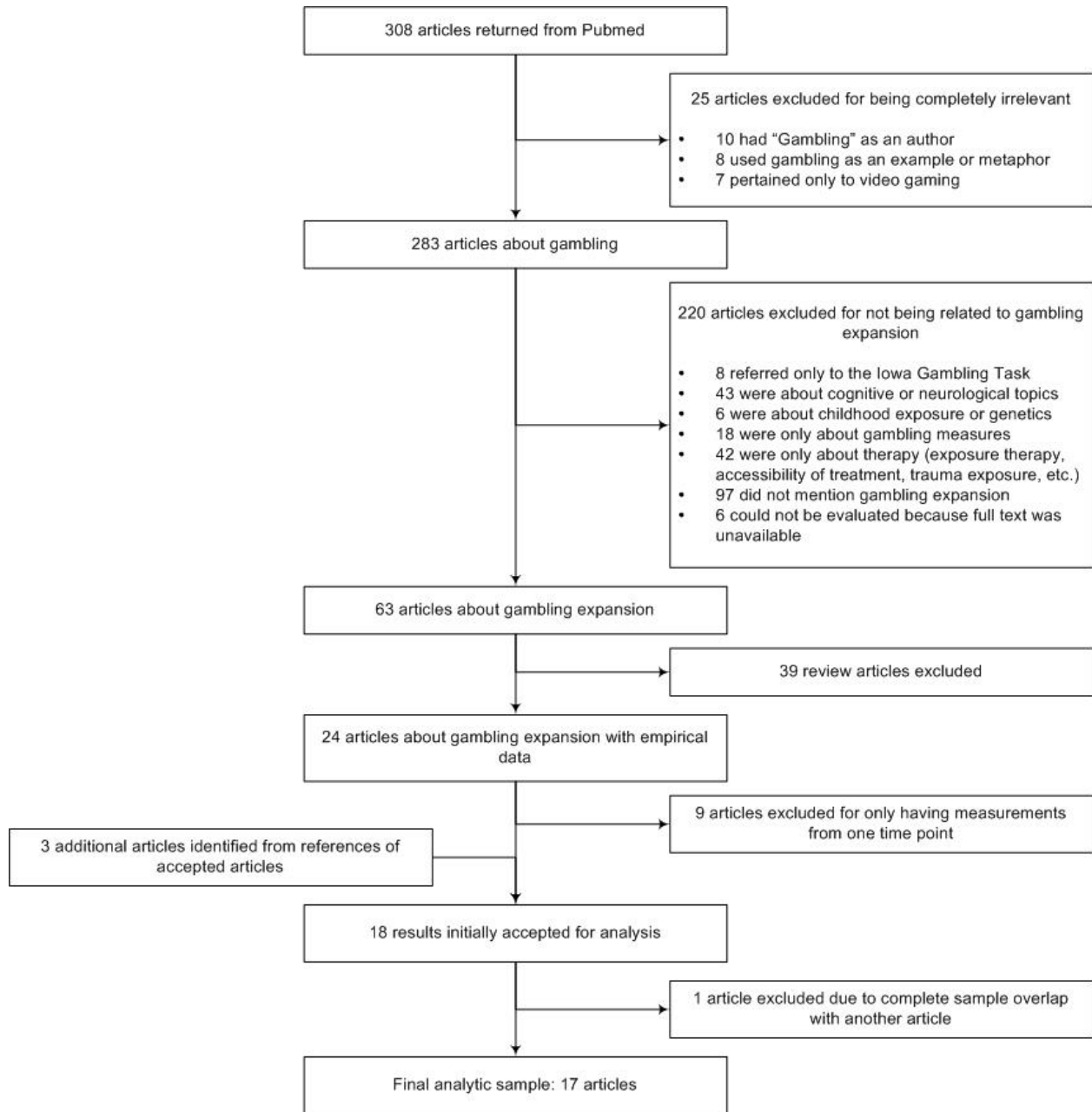
Peer-Reviewed Literature

We performed a Pubmed³⁶² search using the search terms (Problem OR pathological OR disordered OR compulsive) AND (gambling OR gaming) AND (expansion OR casino OR exposure OR opening OR establish* OR availability OR access OR accessibility) NOT Parkinson's, and filtering for English-only results. This search returned 308 articles. Figure 112 below presents a CONSORT diagram describing the number of articles accepted and rejected, along with reasons for acceptance and rejection. As Figure 112 shows, 25 results were completely irrelevant and unrelated to gambling. We then reviewed the remaining 283 about gambling. Of these, we excluded 220 articles because they were not directly related to gambling expansion. Next, we excluded 39 review articles that addressed the topic of gambling expansion but did not present new empirical data. Of the remaining 24 empirical studies about gambling expansion, nine had measurements from only one time point; we excluded these studies yielding a sample of 15 articles. One of these articles was later excluded when it was determined that its sample overlapped completely with another article within the sample. Therefore, the Pubmed search resulted in 14 unique studies.

To maximize the number of articles in our analyses, we reviewed the references included in these 14 articles and the 39 reviews to locate additional appropriate articles that our Pubmed search might not have detected. Through these citation reviews, we identified three additional articles that fit our analytic inclusion parameters, yielding a final analytic sample of 17 articles. A full list of included studies is in Appendix II.

³⁶² For this report, we used Pubmed as the primary scientific search engine. Searches completed using alternative search engines (e.g., PsycInfo, Pubget, Google Scholar, etc.) might yield different outcomes.

Figure 112: CONSORT diagram for gambling expansion peer-reviewed articles



Gray Literature

We also performed a search for gray literature (e.g., articles, reports and other documents that have not been subjected to traditional academic peer-review) related to gambling expansion by querying various sources. We began by collecting US reports listed on the Alberta Gambling Research Institute website³⁶³ The Alberta Gambling Research Institute maintains a listing of

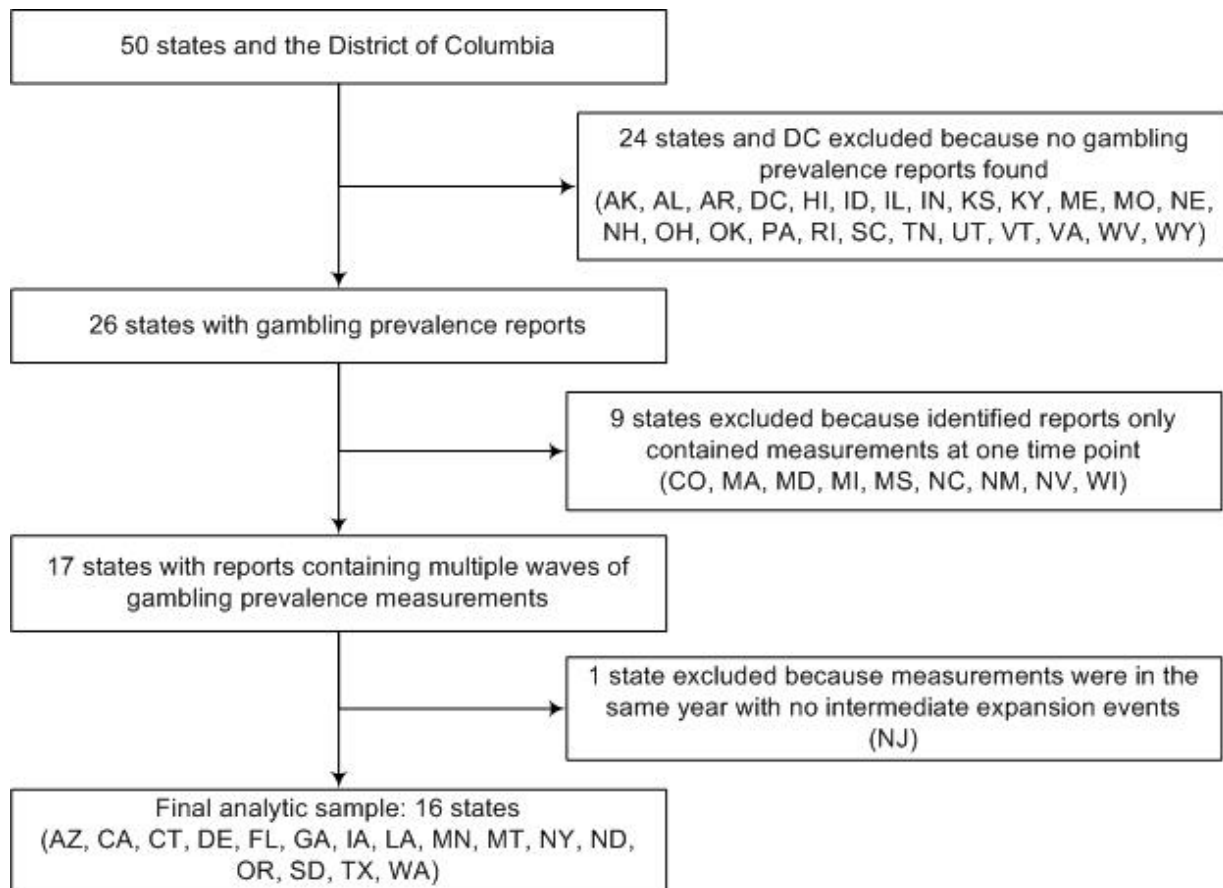
363

<http://www.abgamblinginstitute.ualberta.ca/LibraryResources/ReferenceSources/PrevalenceUnitedStates.aspx>

government reports related to gambling and pathological gambling by state. At the same time, we ran Google and Google Scholar searches using the following search query (Problem OR pathological OR disordered OR compulsive) AND (gambling OR gaming) AND (rates OR prevalence OR incidence) AND [State name]. We repeated this search for all states. This resulted in an initial sample of 34 US reports from 26 states. Some report sets were not eligible for inclusion in our assessment. For example, some states had results only from one time point; therefore, we were unable to assess gambling expansion-related social impact changes. After obtaining and reviewing these sources, we maximized our inclusion list by locating other relevant reports from the references cited within the reports. This process resulted in the identification of another 13 reports.

As Figure 113 summarizes, our final analytic sample for gray literature reports consisted of 44 reports from 16 states. A full list of included studies is in Appendix III.

Figure 113: CONSORT diagram for gambling expansion state reports



Coding

Two members of the research staff coded the peer-reviewed publications (N=17) for methodological quality, overlapping on just over half (n=10). We calculated percent agreement, and, where possible, kappa, between coders for 10 different categories:

- Design
 - 1=prospective; 2=cross-sectional; 3=both (w/ results reported for both)
- Number of data collection time points
- Control group
 - 1=no control group; 2=non-equivalent control group; 3 = actual control group
- Population
 - 1=some sort of general population; 2=some sort of population of gamblers (including gamblers in treatment); 3=online or marketing panel; 4=other
- Sampling
 - 1=Simple random; 2=Random at the level of household (i.e., individual selected from within the randomly selected household); 3=stratified or cluster design; 4=convenience, but not self-selected; 5=self-selected (e.g., sign up or respond to ad); 6 = other
- Data collection
 - 1 = Self-report; 2 = Observation; 3 = Actual gambling behavior; 4 = Review of records
- Gambling measures
 - 1 = SOGS; 2 = NODS; 3 = PGSI/CPGI; 4 = GA's 20 questions; 5 = DSM-IV screen; 6 = Lie-Bet; 7 = Other
- N at each wave
 - (only percent agreement calculated)
- Response rate
 - (only percent agreement calculated)
- Retention rate
 - (only percent agreement calculated)

For each category, a third coder reviewed all situations in which the two primary coders disagreed and assigned a final code. This coding procedure has been used successfully in other studies that summarize a body of literature.³⁶⁴

We used the same basic procedure for the gray (i.e., state report) literature. In this case, because evaluation of expansion-related impacts often involved multiple reports, the two primary

³⁶⁴ Howard J. Shaffer et al., "The Epidemiology of College Alcohol and Gambling Policies," *Journal of Harm Reduction* 2, no. 1 (2005), <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=549515&blobtype=pdf>; Shaffer and Hall, "Updating and Refining Meta-Analytic Prevalence Estimates of Disordered Gambling Behaviour in the United States and Canada; Howard J. Shaffer, Matthew N. Hall and Joni Vander Bilt, "Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-Analysis," (Boston: Presidents and Fellows of Harvard College, 1997); Shaffer, Hall and Vander Bilt, "Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Research Synthesis."

coders coded each state instead of each report (e.g., if a state had three cross-sectional reports, one before expansion and two after, the coders considered this to be a cross-sectional design with three time points). If a state had different sets of reports for different populations (e.g., adult and adolescent), the coders considered these report sets separately. For the state report literature, the coders again overlapped on half (n=8) of the 16 states with expansion-related reports. Again, a third coder resolved discrepancies and assigned final codes.

Outcome and Expansion Event Extraction. In addition to coding methodological quality, for both the peer review and state literature, three coders extracted information from each article about rates of gambling participation, subclinical gambling problems, and disordered (i.e., pathological) gambling at each study wave, as well as the significance of differences in rates between waves. For the peer review literature, coders also independently assessed the expansion event(s) mentioned in the article. Coder pairs again overlapped on just over half of the articles and reports in determining outcomes, and a non-primary coder again resolved discrepancies.

The state report literature did not always describe the specific expansion events that occurred between reports. Consequently, we employed a fourth coder who had not been involved in rating methodological quality or outcome to conduct web searches and place calls to gambling venues to determine the nature of the within-state gambling changes that occurred between reports.

Methodological Quality Reduction. Based on the methodological coding and outcome extraction, we assigned each peer review article and each set of state reports a methodological quality score as follows:

- 1 point for studies that used longitudinal designs
- 1 point per follow-up wave beyond baseline
- 1 point for a non-equivalent control group design; 2 points for an actual control group
- 1 point for general population
- 1 point for stratified design; 2 points for random or random at household level design
- 1 point for initial N>1000 total for cross-sectional studies, initial N>400 total for longitudinal studies (i.e., ensuring power ~80% to detect differences of 3% in PG rates)
- 1 point for averaged response rates $\geq 70\%$
- 1 point for averaged retention rates $\geq 70\%$
- 1 point for all prevalence rates measured in past year or more recent time span

Expansion Event Reduction. Based on the extracted events, we grouped the interval between each wave of each peer review article and each set of state reports by applying the following categories:

- Casinos – new introduction
- Casinos – expansion
- EGM /slots parlor – new introduction

- EGM/slots parlor – expansion
- Lottery – new introduction
- Lottery – expansion
- Internet gambling – new introduction
- Internet gambling – expansion
- Horse/dog race betting – new introduction
- Horse/dog race betting – expansion

This grouping allowed us to assign gambling expansion scores (excluding retraction studies) as follows:

- 1 point for the addition of one type of gambling
- 2 points for the addition of two types of gambling
- 3 points for the addition of more than two types of gambling
- 1 point for one venue added
- 2 points for two venues added
- 3 points for more than two venues added
- 1 point for gambling expansion
- 2 points for gambling introduction

Analysis

Coding Reliability – Peer-Review Literature

As described above in the Coding section, two researchers coded the 17 peer review articles for methodological quality, overlapping on 10 articles. For these overlapping articles, we calculated coder reliability in terms of percent agreement and, where possible, kappa³⁶⁵ for the 10 methodological categories.

For time points, control group, data collection, gambling measures, response rate and study N, percent agreement ranged from 88 percent to 100 percent. Kappas, for those categories that permitted a calculation, ranged from 0.76 to 1.0. For design, percent agreement was 70 percent, but kappa was low (0.25) due to the paucity of data points. In this case, the third coder who reviewed discrepancies determined that the first coder inadvertently had entered the wrong code number for two studies. Coders were in 100 percent agreement about design after review. For population and sampling, percent agreement ranged from 58 percent to 74 percent and kappas were 0.40 for both categories when all coding options were considered. However, when we combined the coding options for these categories into broader categorizations, general population vs. other and random, household, or stratified sample vs. other, percent agreement increased to 89 percent for population and 95 percent for sampling; kappa increased to 0.69 and 0.85 respectively. This alteration for population coding retained the categories necessary for assessing methodological quality. For sampling, we decided to retain separation of the household and stratified sample categories. The third coder in this case identified a systematic coding

³⁶⁵ Kappa is a measure of agreement that is used with categorical variables.

difference between the first and second coder; all coders were in agreement about the third coder's resolution. Finally, the two coders did not agree on the calculation of retention rates for one of the two longitudinal studies on which they overlapped. The first coder calculated the retention rates using the "eligible sample" from baseline dictated by the authors – these were individuals from the baseline wave who agreed to be interviewed at a later time point. The second coder calculated the retention rates using the entire baseline sample. The third coder reviewed this discrepancy and all coders agreed to accept the second coder's definition.

For outcome extractions, the two coders assessed the type of outcome (e.g., lifetime, past year) and the value of the outcome (e.g., 1.9 percent with SOGS score of 5+). On outcome type, percent agreement was 80 percent and kappa was 0.68. The third coder resolved discrepancies and all coders agreed with the resolution. For outcome values, the coders agreed on 69 of the 83 values they extracted (83 percent). Again, the third coder resolved discrepancies and all coders agreed with the resolution.

Analytic Review – Peer-Review Literature

Figure 114 below summarizes the results from our peer review literature analysis. Our methodological quality scale scores could range from 0-13. Our coding indicated that the 17 available gambling expansion studies' methodological quality actually ranged from 1-10. Nine studies had scores of 5 or less, and eight had scores greater than 5. Our coding indicated that the 17 available gambling expansion studies' gambling expansion scores, calculated between each wave, ranged from 3-8.

Participation – Peer Review Literature. With respect to overall gambling participation, we observed that nine studies did not report this outcome. Three studies reported this outcome, but did not include any statistical test of change. Among those that reported statistical tests for changes in gambling participation, one study indicated no change following gambling expansion, and 4 indicated some change. Three of the four that indicated a change suggested an overall decrease in gambling participation, and one indicated an increase. It is important to note that one study (i.e., Lund, 2009) indicating a decrease in gambling participation examined gambling retraction, rather than gambling expansion.

The methodological quality of the one study that indicated a significant increase (Ladouceur et al., 1999) was 5, whereas the average methodological quality of the two studies that indicated a significant decrease (excluding the study of gambling retraction – Lund, 2009) was 5.5. The methodological quality of the study that indicated no change (Room et al., 1999) was 7. The average methodological quality among those studies that reported no statistical test of change was 7.

The gambling expansion score for the study that indicated a significant increase in gambling participation (Ladouceur et al., 1999) was 7, and the average expansion score among those that indicated a significant decrease (excluding the study of gambling retraction – Lund, 2009) was also 7. The gambling expansion score of the study that indicated no change (Room et

al., 1999) was 4. The average expansion score among those studies that reported no statistical test of change was 4.7.

Problems – Peer Review Literature. With respect to problem gambling (i.e., Level 2 gambling), we observed that eight studies did not report this outcome. One study reported this outcome, but did not include any statistical test of change. Among those that reported statistical tests for problem gambling changes, seven indicated no change following gambling expansion. One study (i.e., Lund, 2009) indicated no reduction in problem gambling following gambling retraction, and one indicated an increase. The study that indicated an increase (i.e., Black et al. 2012) found an increase in problem gambling between two waves of data, but no increase between wave 2 and 3, though expansion continued between those waves.

The methodological quality for the study that indicated an increase was 4. The average methodological quality among those studies that indicated no change was 6.3. The methodological quality for the study that reported no statistical test of change was 7.

The gambling expansion score for the study that indicated a significant increase for problem gambling over time (Black et al., 2012) was 7 between the first two waves and 5 between waves 2 and 3. The average gambling expansion score among those studies that indicated no change was 5.9. The expansion score for the study that reported no statistical test of change was 4.

Gambling Disorder – Peer Review Literature. With respect to gambling disorder (i.e., Level 3 gambling), we observed that six of the 17 studies did not report this outcome. Three studies reported upon this outcome, but did not include any statistical test of change. Among those that reported statistical tests for gambling disorder changes, five indicated no change on any outcome following gambling expansion, and three indicated some change. Specifically, one study reported an increase in lifetime rates and no change in past year rates (Abbott et al., 2013); another reported an increase between two waves of data but no increase between wave 2 and 3, though expansion continued between those waves (Black et al., 2012); and, finally, one study of gambling retraction (Lund, 2009) reported a decrease over time.

The average methodological quality among those studies that indicated a significant increase was 4.5, whereas the average methodological quality of those that indicated a significant decrease (excluding the study of gambling retraction) was 5.5. The average methodological quality among those studies that indicated no change on an outcome was 5.8. The average methodological quality among those studies that reported no statistical test of change was 4.7.

The gambling expansion score for the study with mixed findings (i.e., Abbott et al., 2013) was 8. The expansion score for the study that reported an increase over time (i.e., Black et al., 2012) was 7; and for the study of gambling retraction – no gambling expansion score was given. The average gambling expansion score among those studies that indicated no change was 5.4. The average expansion score among those studies that reported no statistical test of change was 5.5.

Other Impact – Peer Review Literature. A number of studies reported outcomes of unknown psychometric quality. It is unclear whether the reliability and validity of these outcomes are satisfactory; however, for completeness of reporting, we include these findings here.

With respect to other gambling expansion social impact (i.e., varied outcomes, such as study-specific surveys), we observed that nine studies did not report this outcome. Two studies reported this outcome, but did not include any statistical test of change. Among those that reported statistical tests for changes in other outcomes, one indicated a decrease following gambling retraction. Five studies indicated activity increases on at least one variable.

The average methodological quality among those studies that indicated a significant increase was 5.2. The average methodological quality among those studies that reported no statistical test of change was 5. The average methodological quality of studies that did not report other study-specific outcomes was 5.

The gambling expansion score for the studies that indicated a significant increase in other gambling expansion social impact was 5. The average expansion score among those studies that reported no statistical test of change was 4.

Exploratory Associations – Peer Review Literature. We examined the relationships between quality, expansion and rates of change for the clinical outcomes (i.e., post minus pre expansion rate; positive scores indicating increases in problem rates) evidenced by the gambling expansion peer review literature. To explore these relationships, first, we calculated the correlation between the 16 methodological quality scores and the 16 gambling expansion scores (averaged across waves) for those studies that examined gambling expansion (excluding the single gambling retraction study). We found that methodological quality scores and gambling expansion scores were inversely related ($r=-0.43$), indicating that research quality decreased for studies that reported more extensive gambling expansion.

Next, we calculated the correlation between interwave change scores (from the 10 studies of expansion that reported subclinical gambling problem rates or disordered gambling rates) and their associated methodological quality scores. For past year and lifetime level 3 gambling problems, methodological quality scores were inversely related to changes in prevalence ($r=-0.37$ and -0.71 , respectively), indicating that research quality was lower for studies reporting larger changes. The same was true for lifetime level 2 rates ($r=-0.22$), but there was no relationship to past year level 2 rates ($r=-0.03$). Last, we calculated the same sets of correlations between interwave change scores and each interwave gambling expansion score. We found a positive relationship between level 2 and level 3 rate changes and gambling expansion: $r=0.11$ for past year level 2 rate changes, $r=0.18$ for lifetime level 3 rate changes, $r=0.46$ for lifetime level 2 rate changes, and $r=0.57$ for level 3 rate changes. Ns for each comparison ranged from 5 to 8, and none of the correlations were statistically significant, so these associations should be interpreted with a high degree of caution.

Summary – Peer Review Literature. The study with the highest methodological quality (i.e., Jacques & Ladouceur, 2006) examined a single gambling expansion event (i.e., opening one casino) and indicated, across four waves of data collection, no overall changes in problem gambling or gambling disorder in the target community compared to a control community. The study with the highest gambling expansion score (i.e., Abbott et al., 2013) examined the introduction and expansion of multiple types of gambling in multiple venues and indicated mixed results. Specifically, they reported reductions in gambling participation, no changes in lifetime or past year problem gambling, and increase in lifetime gambling disorder, but no change in past year gambling disorder.

Of all the outcomes reported, regardless of study, quality or outcome, 15 indicated no overall statistically significant change in activity (e.g., participation or problems) after gambling expansion, five showed a decrease in activity (excluding the gambling retraction study), and 10 indicated an increase in activity. Those that indicated an increase in gambling-related activities tended (i.e., 6 of 10) to report outcomes that were not derived from psychometrically tested measures (e.g., PGSI or SOGS), but rather idiosyncratic variables of unknown applicability. Increases associated specifically with validated measures of gambling-related problem measures either were mixed (i.e., Abbott et al., 2013) or non-linear (i.e., Black et al., 2012). There *was* an apparent positive association between levels of gambling expansion change in gambling problem rates. However, the association was not statistically significant because of the small number of comparisons and should be interpreted with caution. Visual inspection of rates on which the associations were based indicates that more expansion tended to be associated with slightly less decrease in rates across time, rather than actual increase.

The available peer-reviewed literature does not provide conclusive evidence of a relationship between gambling expansion and gambling-related problems. Currently, the findings are mixed and vary by the type of outcome under consideration. Unfortunately, an association between study quality and the amount of change reported further complicates and limits our ability to interpret the extant literature. Some research suggests that expansion might instigate problems; however, the majority of evidence indicates otherwise. Nonetheless, the number of findings that indicate expansion has no effect, or even a regressive long-term effect is too small to say definitively that no relationship exists between gambling expansion and gambling-related problems. The most cautious approach to this issue would be to collect additional original high-quality prospective longitudinal data, to add to and clarify the existing body of literature.

Figure 114: Peer review expansion literature

Study	Methodological Quality (design+waves+control +population+sampling +N+response+retentio n+timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
Abbott, Romild & Volberg (2013)	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> Casinos – introduced (4) EGMs – expansion Internet gambling – introduced Horse/dog betting – expansion (3+3+2)= 8	PY: 88*/72* P30: 69*/53*	LT: 2.7/2.5 PY: 1.4/1.3	LT: 1.2*/2.0* PY: 0.6/0.9	
Black, McCormick, Losch, Shaw, Lutz & Allen (2012)	(0+2+0+1+1+0+0+0+0) =4	<u>W1-W2</u> Casinos – introduced (7) Horse/dog betting – expansion (2+3+2)=7 <u>W2-W3</u> Casinos – expansion (21) (1+3+1)=5		LT: 1.6*/3.5/2.2*	LT: 0.1*/1.9/1.4*	
Bondolfi, Jermann, Ferrero, Zullino, & Osiek (2008)	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> Casinos – introduced (19) (1+3+2)=6		LT: 2.2/2.2 PY: 1.0/0.8	LT: 0.8/1.1 PY: 0.2/0.5	
Govoni, Frisch, Rucich & Getty (1998)	(0+1+0+1+2+1+0+0+1) =6	<u>W1-W2</u> Casinos – introduced (1) (1+1+2)=4	PY~: 66/62	PY: 1.5/1.1	PY: 0.8/1.1	
Grun & McKeigue (2000)	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> Lottery – introduced (1+3+2)=6	P14~: 40/75			<u>% gambling > 20€ per week</u> P14: 0.8*/2.5* <u>% gambling > 10% of income</u> P14: 0.4*/1.7*
Jacques & Ladouceur (2006)	(1+3+1+1+2+1+0+0+1) =10	<u>W1-W2</u> Casinos – introduced (1) (1+1+2)=4	<u>Target</u> PY~: 90/91/90/89 <u>Control</u> PY~: 90/92/93/92	<u>Target</u> PY: 2.1/2.4/1.5/1.5 <u>Control</u> PY: 1.6/1.7/1.2/0.9	<u>Target</u> PY: 1.4/1.8/1.5/1.0 <u>Control</u> PY: 0.5/0.5/0.0/0.4	

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Figure 114 (continued)

Study	Methodological Quality (design+waves+control +population+sampling+ N+response+retention +timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
Jason, Taff & Boglioli (1990)	(0+4+0+0+0+1+0+0+1) =6	<u>W2-W3</u> Casino – expansion (1) (1+1+1)=3 <u>W3-W4</u> Casino – expansion (1) (1+1+1)=3				<u>Casino-related Deaths</u> PY~: 66/67/80/86/99
LaBrie, Nelson, LaPlante, Peller, Caro & Shaffer (2007)	(0+1+1+1+0+1+0+0+1) =5	<u>W1-W2</u> Casinos – introduced (2) (1+2+2)=5				<u>Target PY %SEs added</u> 44**,41**/56**,59** <u>Control PY %SEs added</u> 64**,62**,72;46/36**,38**,28;54
Ladouceur, Jacques, Ferland & Giroux (1999)	(0+1+0+1+2+1+0+0+0) =5	Casino – introduced (3) Lottery – expansion (2+3+2)=7	PY: 54**/63**	LT: 2.1/2.4	LT: 1.2/2.1	
Ladouceur, Jacques, Chevalier, Sévigny, Hamel (2005)	(0+1+0+1+2+1+0+0+1) =6	<u>W1-W2</u> VLT – expansion Casino – expansion (1) (2+3+1)=6	PY: 90*/81*	PY: 1.4/0.9	PY: 1.0/0.8	
Lund (2009)	(1+1+0+0+2+1+0+1+1) =7	<u>W1-W2</u> EGMs – banned (NA)	P90: 97**/78**	P90: 4.9/3.7	P90: 1.0*/0.4*	<u>P90 Lie & Bet (from Lie Bet)</u> 4.9/3.7 <u>P90 Lie, Bet, & Chase</u> 1.0*/0.4*
Lupu & Todirita (2013)	(0+1+0+0+0+0+0+0+0) =1	<u>W1-W2</u> EGMs – expansion Internet gambling – introduced (2+3+2)=7		LT~: NA/23.5	LT~: 6.8/3.5	
Room, Turner & Ialomiteanu (1999)	(1+1+1+1+2+0+0+0+1) =7	<u>W1-W2</u> Casinos – introduced (1) (1+1+2)=4	<u>Target</u> PY: 87/87 <u>Control</u> PY: 86/85	<u>Target</u> PY~: 2.5/4.4 <u>Control</u> PY: unmeasured	<u>Target</u> PY~: 1.0/0.4 <u>Control</u> PY: unmeasured	<u>Target PY SOGS score</u> 0.13*/0.20* <u>Control PY SOGS score</u> NA/0.14*
Shepherd, Gohdes, London (1998)	(1+2+0+1+2+0+0+0+0) =6	<u>W1-W2</u> Lottery – introduced (1+3+2)=6				<u># of DSM criteria endorsed</u> <u>(timeframe unclear)</u> 0.13*/0.24*/0.25*

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Figure 114 (continued)

Study	Methodological Quality (design+waves+control +population+sampling+ N+response+retention +timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
Slutske (2006)	(0+1+0+1+2+1+1+0+0) =6	<u>W1-W2</u> Casino – expansion Lottery – expansion (2+3+1)=6			LT~: 0.8/0.4	
Toneatto, Ferguson & Brennan (2003)	(0+2+0+0+0+0+1+0+0) =3	<u>W1-W2</u> Casino – introduced (1) (1+1+2)=4				<u>LT SOGS Score</u> No descriptives reported; SOGS score increased significantly across time points, but only for card players
Xian, Scherrer, Slutske, Shah, Volberg & Eisen (2007)	(1+1+0+0+0+1+1+1+0) =5	<u>W1-W2</u> Casinos – expansion Lottery – expansion (2+3+1)=6				<u>LT 1+ DSM criteria</u> 19.8/NA <u>PY 1+ DSM criteria</u> NA/8.2 <u>% variance accounted for by unique environmental factors</u> 13~/30~

Where LT=lifetime; PY=past year; P90=past 90 days; P14=past 14 days; W=wave; SE=casino self-excluders; NA=not applicable (not measured). * Rates differ significantly from each other, p < .05. ** Rates differ significantly from each other, p < .01. *** Rates differ significantly from each other, p < .001. ~Difference between rates not tested.

Coding Reliability – Gray Literature

As the Coding section above describes, two researchers coded reports from the 16 included states for methodological quality, overlapping on eight states. For these overlapping states, we calculated coder reliability in terms of percent agreement and, where possible, kappa, for the 10 methodological categories.

For design, time points, control group, population, data collection, gambling measures, response rate and study N, percent agreement ranged from 83 percent to 100 percent. Kappas for those categories, which permitted a calculation, ranged from 0.65 to 1.0. For sampling, percent agreement was 63 percent and kappa was 0.31 when all coding options were considered. However, when we combined the coding options for this category into broader categorizations: random, household or stratified sample vs. other, percent agreement increased to 79 percent though kappa remained low. The third coder resolved discrepancies for sampling; all coders were in agreement about the third coder's resolution.

For outcome extractions, the two coders assessed the type of outcome (e.g., lifetime, past year) and the value of the outcome (e.g., 1.9 percent with SOGS score of 5+). On outcome type, percent agreement was 77 percent and kappa was 0.66. The third coder resolved discrepancies and all coders agreed with the resolution. For outcome values, the coders agreed on 64 of the 85 values they extracted (75 percent). Again, the third coder resolved discrepancies, and all coders agreed with the resolution.

Analytic Review – Gray Literature

Figure 115 below summarizes the results from our gray (i.e., state reports) literature analysis. Our methodological quality scale scores could range from 0-12. Our coding indicated that the 19 state report sets' methodological quality actually ranged from 2-6. Fifteen states had scores of 5 or less, and four had scores greater than 5. Our coding indicated that the 19 states' gambling expansion scores, calculated between each wave, ranged from 4-8.

Participation – Gray Literature. With respect to overall gambling participation, we observed that two state report sets did not report this outcome. Six report sets reported this outcome, but did not include any statistical test of change. Among those that reported statistical tests for changes in gambling participation, three indicated no change following gambling expansion, and eight indicated some change. Four of the eight that indicated a change suggested an overall decrease in gambling participation and four indicated an increase.

The average methodological quality among those state report sets that indicated a significant increase was 5, whereas the average methodological quality of those that indicated a significant decrease was 5.5. The average methodological quality among those reports that indicated no change was 5. The average methodological quality among those reports that reported no statistical test of change was 4.2.

The gambling expansion score for the states that indicated a significant increase in gambling participation was 7.3, and the average expansion score among those that indicated a significant decrease was 5.5. The average gambling expansion score among those state report sets that indicated no change was 7. The average expansion score among those reports that reported no statistical test of change was 6.1.

Problems – Gray Literature. With respect to problem gambling (i.e., Level 2 gambling) rate changes, we observed that two state report sets did not report this outcome. Five states reported this outcome, but did not include any statistical test of change. Among those that reported statistical tests for problem gambling changes, nine indicated no change following gambling expansion. Three states reported an increase in problem gambling following expansion. No states reported decreases in problem gambling.

The average methodological quality for the report sets that indicated increased problem gambling was 4.7. The average methodological quality among those report sets that indicated no change was 4.3. The average methodological quality for the report sets that reported no statistical test of change was 4.6.

The average gambling expansion score for the report sets that indicated increased problem gambling was 7.3. The average gambling expansion score among those reports that indicated no change was 6.4. The expansion score for the report sets that reported no statistical test of change was 6.3.

Gambling Disorder – Gray Literature. With respect to gambling disorder (i.e., Level 3 gambling) rate changes, we observed that two of the 19 state report sets did not report this outcome. Six report sets reported upon this outcome, but did not include any statistical test of change. Among those that reported statistical tests for gambling disorder changes, eight indicated no change following gambling expansion, and four indicated some change. Specifically, report sets from Iowa, Montana, New York and North Dakota reported an increase in rates.

The average methodological quality among those report sets that indicated a significant increase was 4.5. The average methodological quality among those report sets that indicated no change on an outcome was 4.4. The average methodological quality among those report sets that reported no statistical test of change was 4.5.

The average gambling expansion score for report sets that indicated an increase in gambling disorders was 6.8. The average gambling expansion score among those reports that indicated no change was 6.6. The average expansion score among those reports that reported no statistical test of change was 6.3.

Other Impact – Gray Literature. We found that none of the state report sets reported only report-specific outcomes – all but two used accepted problem gambling and disordered gambling measures and rates. The two that didn't (adolescent reports for Florida and Arizona) did not include any problem rates measured at multiple time points.

Exploratory Associations – Gray Literature. We examined the relationships between quality, expansion and rates of change for the clinical outcomes (i.e., post minus pre expansion rate; positive scores indicating increases in problem rates) evidenced by the gambling expansion gray literature. To explore these relationships, first we calculated the correlation between the 18 methodological quality scores and the 18 gambling expansion scores (averaged across waves) for those state report sets that examined gambling expansion (excluding the single state, Arizona, that had only retraction). We found that methodological quality scores and gambling expansion scores were slightly positively related ($r=0.15$), indicating that for the state reports, research quality increased slightly for studies that reported more extensive gambling expansion.

Next, we calculated the correlation between interwave change scores (from the 17 state report sets that reported subclinical gambling problem rates or disordered gambling rates) and their associated methodological quality scores. For past year level 2 and lifetime level 3 gambling problems, methodological quality scores were positively related to changes in prevalence ($r=0.45$ and 0.31 , respectively), indicating that research quality was higher for studies reporting larger changes. There was no relationship past year level 3 rates ($r=-0.08$) or lifetime level 2 rates ($r=0.10$). Last, we calculated the same sets of correlations between interwave change scores and each interwave gambling expansion score. We found a positive relationship between past year level 2 and lifetime level 3 rate changes and gambling expansion: $r=0.28$ for past year level 2 rate changes, $r=0.31$ for lifetime level 3 rate changes. There was no relationship between expansion and past year level 3 or lifetime level 2 rate chances, $r=0.07$ and 0.09 , respectively. Ns for each comparison ranged from 11 to 20, and none of the correlations were statistically significant, so these associations should be interpreted with a high degree of caution.

Summary – Gray Literature. Again, as with the peer review literature, findings were mixed and the majority of state report sets found no significant changes in gambling problems after expansion. There was some preliminary evidence that the extent of expansion related positively to gambling problem rates, but the set of studies was too small to draw any strong conclusions. As with the peer review literature, the most cautious approach to this issue would be to collect additional original high-quality prospective longitudinal data to add to and clarify the existing body of literature.

Figure 115: Gray (i.e., state reports) expansion literature

Study	Methodological Quality (design+waves+control +population+sampling+ N+response+retention +timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
Arizona (adolescents)	(0+2+0+0+0+1+0+0+0) =3	<u>W1-W2</u> No change (NA) <u>W2-W3</u> Horse/dog racing – decrease (- 1) (NA)	PY~: 66/60/57			
California	(0+1+0+1+1+1+0+0+0) =4	<u>W1-W2</u> Casino – introduced (54) (1+3+2)=6	LT~: 89/83 PY: na/58	LT: na/2.2 PY: na/0.9	LT~: 1.2/1.5 PY: na/0.4	
Connecticut	(0+2+0+1+1+0+0+0+0) =4	<u>W1-W2</u> Casinos – introduced (1) (1+1+2)=4 <u>W2-W3</u> Casinos – expansion (1) Lottery – expansion Pari-mutuel – decrease (2+3+1)=6	LT: NA/96/NA PY~: NA/88/70	LT~: 3.6/4.2/2.2 PY~: NA/2.2/0.9	LT~: 2.7/1.2/1.5 PY~: NA/0.6/0.7	
Delaware	(0+1+0+1+2+1+0+0+0) =5	<u>W1-W2</u> EGM – expansion Lottery – expansion (2+3+1)=6	LT: NA/93 PY: NA/72 P18mo: 60/NA	PY: NA/0.4 P18mo: 3.5/NA	PY: NA/0.3 P18mo: 1.1/NA	
Florida: adolescents	(0+1+0+0+1+1+0+0+0) =3	<u>W1-W2</u> Casino – expansion (3) EGMs – introduced (2 racinos) Horse/dog racing – expansion (1) (3+3+2)=8	LT~: 68/NA PY~: 43/55	LT~: 4.9/NA PY~: 4.3/NA	LT~: 1.3/NA PY~: 1.1/NA	<u>Gambling caused arguments w/ friends or family~</u> NA/14.9
Georgia	(0+2+0+1+1+1+0+0+1) =5	<u>W2-W3</u> Internet gambling – introduced online lottery (2+3+2)=7	LT: 74/69*/88* PY~: 65/NA/85	LT~: 2.8/NA/2.6 PY~: 1.5/NA/1.1	LT~: 1.6/NA/1.4 PY~: 0.8/NA/0.4	<u>Combined Level 2/3</u> LT: 4.4/5.0/4.0 PY: 2.3/2.4/1.5

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Figure 115 (continued)

Study	Methodological Quality (design+waves+control +population+sampling+ N+response+retention +timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
Iowa	(0+2+0+1+1+0+0+0+0) =4	<u>W1-W2</u> Casinos – introduced (7) Dog/horse betting – expansion (2+3+2)=7 <u>W2-W3</u> Casinos – expansion (21) (1+3+1)=5		LT: 1.6*/3.5/2.2*	LT: 0.1*/1.9/1.4*	
Louisiana	(0+3+0+1+1+1+0+0+0) =6	<u>W1-W2</u> EGMs – expansion Casinos – expansion (2) (2+3+1)=6 <u>W2-W3</u> Casino – expansion (2) (1+2+1)=4 <u>W3-W4</u> Casino – expansion (3) Racino – introduced (4) Horse/dog racing – decrease (- 4) (2+3+2)=7	LT~: NA/70/68/NA PY~: 72/62/68/NA	LT~: 3.4/2.3/2.9/1.7	LT~: 1.4/1.6/1.6/1.4	
Minnesota	(0+1+0+1+1+1+1+0+1) =6	<u>W1-W2</u> Casino – expansion (9) Lottery – introduced Slots parlor – introduced (1) (3+3+2)=8	LT: 78*/83* PY: 64/65 P30: 23*/41*	PY: 1.6*/3.2*	PY: 0.9/1.2	
Montana	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> Slots parlor – expansion Horse/dog racing – introduced (2+3+2)=7	LT~: 86/NA PY: 74/78	LT: 2.3/2.9 PY: 1.5/2.0	LT: 1.5*/2.8* PY: 0.7/1.6	

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Figure 115 (continued)

Study	Methodological Quality (design+waves+control +population+sampling+ N+response+retention +timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
New York	(0+1+0+1+1+1+0+0+0) =4	<u>W1-W2</u> Casinos – introduced Lottery – expansion Horse/dog racing – expansion (3+3+2)=8	LT: 84*/90* PY~: NA/80	LT: 2.8*/4.7* PY~: NA/2.2	LT: 1.4*/2.6* PY~: NA/1.4	
North Dakota	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> Casino – introduced (5) (1+3+2)=6	LT: 82/81 PY: 72/70	LT: 2.5/2.0 PY: 1.3/0.7	LT: 1.0*/1.8* PY: 0.7*/1.4*	
Oregon	(0+2+0+1+1+1+0+0+1) =6	<u>W1-W2</u> Horse/dog racing – decrease Casino - expansion (4) (1+3+1)=5 <u>W2-W3</u> Horse/dog racing – decrease (- 1) Casino – expansion (2) (1+2+1)=4	LT: 87*/80*/83* PY: 70*/61*/65*	LT: 3.1/2.7/2.4 PY: 1.9/1.4/1.7	LT: 1.8/1.9/1.9 PY: 1.4/0.9/1.0	<i>Combined Level 2/3</i> PY: 3.3*/2.3*/2.7*
Oregon (adolescents)	(0+1+0+0+0+1+0+0+0) =2	<u>W1-W2</u> Horse/dog racing – decrease (- 1) Casino – expansion (2) (1+2+1)=4	LT: 75*/38* PY: 66*/46*	LT: 5.0/4.6	LT: 1.4/1.3	
South Dakota	(0+1+0+1+1+1+1+0+1) =6	<u>W1-W2</u> Casino – expansion (1) Lottery – introduced Horse/dog racing – expansion Slots parlor – introduced (1) (3+3+2)=8	LT: 86*/76* P6mo: NA/65	LT: 1.8/1.4 P6mo: 0.8/0.7	LT: 1.0/0.9 P6mo: 0.6/0.5	
Texas	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> VLT – expansion Casino – expansion (1) (2+3+1)=6	LT: NA/87 PY: 49*/68*	LT: 3.5/3.6 PY: 1.7/2.2	LT: 1.3/1.8 PY: 0.8/0.8	

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Figure 115 (continued)

Study	Methodological Quality (design+waves+control +population+sampling+ N+response+retention +timeframe)	Expansion Events (# of venues) (expansion score – see expansion coding section)	Gambling Participation Rate (W1%/W2%/W3%/ W4%)	Subclinical Gambling Problem Rate (W1%/W2%/W3%/ W4%)	Disordered Gambling Rate (W1%/W2%/W3%/ W4%)	Other Outcome (W1/W2/W3/W4)
Texas (adolescents)	(0+1+0+0+1+0+0+0+0) =2	<u>W1-W2</u> Lottery – introduced (1+3+2)=6	PY: NA/49	LT: 11.2/9.9	LT: 5.0/2.3	
Washington	(0+1+0+1+1+1+0+0+1) =5	<u>W1-W2</u> Lottery - expansion Casino – expansion EGMs – introduced (3+3+2)=8	LT: 91/89 PY: 80/74	LT: 3.6/3.7 PY: 1.9/1.8	LT: 1.5/1.3 PY: 0.9/0.5	
Washington (adolescents)	(0+1+0+0+1+1+0+0+0) =3	<u>W1-W2</u> Lottery - expansion Casino – expansion EGMs - introduced (3+3+2)=8	LT: 83*/78* PY: 69/65	LT: 9.0/7.5	LT: 0.9/0.9	

Where LT=lifetime; PY=past year; P30=past 30 days; P18=past 18 months; P6=past 6 months; W=wave; SE=casino self-excluders; NA=not applicable (not measured). * Rates differ significantly from each other, p < .05. ** Rates differ significantly from each other, p < .01. *** Rates differ significantly from each other, p < .001. ~Difference between rates not tested.

Appendix II: List of Included Peer-Reviewed Gambling-Expansion Articles

- Abbott, Max W., Ulla U. Romild, and Rachel A Volberg. "Gambling and Problem Gambling in Sweden: Changes Between 1998 and 2009." *Journal of Gambling Studies*. In press.
- Black, Donald W., Brett McCormick, Mary E. Losch, Martha Shaw, Gene Lutz and Jeff Allen. "Prevalence of problem gambling in Iowa: Revisiting Shaffer's adaptation hypothesis." *Annals Of Clinical Psychiatry* 24, no. 4 (2012): 279-284.
- Bondolfi, G., F. Jermann, F. Ferrero, D. Zullino, and C.H. Osiek. "Prevalence of pathological gambling in Switzerland after the opening of casinos and the introduction of new preventive legislation." *Acta Psychiatrica Scandinavica* 117, no. 3 (2008): 236-239.
- Govoni, Richard, G. Ron Frisch, Nicholas Rupcich and Heather Getty. "First year impacts of casino gambling in a community." *Journal Of Gambling Studies* 14, no. 4 (1998): 347-358.
- Grun, Lucia, and Paul McKeigue. "Prevalence of excessive gambling before and after introduction of a national lottery in the United Kingdom: another example of the single distribution theory." *Addiction* 95, no. 6 (2000): 959-966.
- Jacques, Christian and Robert Ladouceur. "A prospective study of the impact of opening a casino on gambling behaviours: 2- and 4-year follow-ups." *The Canadian Journal Of Psychiatry / La Revue Canadienne De Psychiatrie* 51, no. 12 (2006): 764-773.
- Jason, Donald R., Mark L. Taff and Lauren R. Boglioli. "Casino-related deaths in Atlantic City, New Jersey 1982-1986." *The American Journal of Forensic Medicine and Pathology* 11, no. 2 (1990):112-123.
- LaBrie, Richard A., Sarah E. Nelson, Debi A. LaPlante, Allyson J. Peller, Gabriel Caro and Howard J. Shaffer. "Missouri casino self-excluders: Distributions across time and space." *Journal Of Gambling Studies* 23, no. 2 (2007): 231-243.
- Ladouceur, Robert, Christian Jacques, Serge Chevalier, Serge Sévigny and Denis Hamel. "Prevalence of pathological gambling in Quebec in 2002." *The Canadian Journal of Psychiatry* 50, no. 8 (2005): 451-456.
- Ladouceur, Robert, Christian Jacques, Francine Ferland and Isabelle Giroux. "Prevalence of problem gambling: A replication study 7 years later." *The Canadian Journal Of Psychiatry / La Revue Canadienne De Psychiatrie* 44, no. 8 (1999): 802-804.
- Lund, Ingeborg. "Gambling behaviour and the prevalence of gambling problems in adult EGM gamblers when EGMs are banned. A natural experiment." *Journal Of Gambling Studies* 25, no. 2 (2009): 215-225.
- Lupu, Viorel and Izabela Ramona Todirita. "Updates of the prevalence of problem gambling in Romanian teenagers." *Journal Of Gambling Studies* 29, no. 1 (2013): 29-36.
- Room, Robin, Nigel E. Turner and Anca Ialomiteanu. 1999. "Community effects of the opening of the Niagara casino." *Addiction* 94, no. 10: 1449-1466.

- Shepherd, R., Ghodse, H. and London, M. (1998). A pilot study examining gambling behaviour before and after the launch of the National Lottery and scratch cards in the UK, *Addiction Research*, 6, 5-12.
- Slutske, Wendy S. "Natural Recovery and Treatment-Seeking in Pathological Gambling: Results of Two U.S. National Surveys." *The American Journal Of Psychiatry* 163, no. 2 (2006): 297-302.
- Toneatto, Tony, Donna Ferguson and Judy Brennan. "Effect of a new casino on problem gambling in treatment-seeking substance abusers." *The Canadian Journal Of Psychiatry / La Revue Canadienne De Psychiatrie* 48, no. 1 (2003): 40-44.
- Xian, Hong, Jeffrey F. Scherrer, Wendy S. Slutske, Kamini R. Shah, Rachel Volberg and Seth A. Eisen. "Genetic and environmental contributions to pathological gambling symptoms in a 10-year follow-up." *Twin Research And Human Genetics* 10, no. 1 (2007): 174-179.

Appendix III: List of Included Gray Literature Gambling-Expansion Articles

(We were unable to obtain reports marked with an asterisk but used information from the other listed reports to determine the findings from those reports.)

Arizona

Arizona Criminal Justice Commission. "Arizona Gambling Profile Report." 2006.

Arizona Criminal Justice Commission. "2008 Arizona Youth Survey." Phoenix, AZ: Arizona Criminal Justice Commission, 2008.

Arizona Criminal Justice Commission. "2010 Arizona Youth Survey." Phoenix, AZ: Arizona Criminal Justice Commission, 2010.

Arizona Criminal Justice Commission. "2012 Arizona Youth Survey." Phoenix, AZ: Arizona Criminal Justice Commission, 2012.

Connecticut

Spectrum Gaming Group. "Gambling in Connecticut: Analyzing the Economic and Social Impacts." Linwood, NJ, 2009.

Volberg, Rachel A. "Legal Gambling in Connecticut: Assessment of Current Status and Options for the Future (Volume One)." 1992.

WEFA Group. "A Study Concerning the Effects of Legalized Gambling on the Citizens of the State of Connecticut." Eddystone, PA, 1997.

Delaware

Health Services Policy Research Group. "The Costs and Consequences of Gambling in the State of Delaware." Newark, DE: University of Delaware, School of Urban Affairs and Public Policy, 2002.

Mateja, Walter, Robert Wilson and Betty Ableman. "A Survey of Gambling in Delaware." Newark, DE: University of Delaware, School of Urban Affairs and Public Policy, 1998.

Florida

Lieberman, Louis and Mary Cuadrado. "Gambling among Florida Middle and High School Students." Sarasota, FL: University of South Florida Sarasota-Manatee, 2006.

Shapira, Nathan A., Mary Ann Ferguson, Kimberly Frost-Pineda and Mark S. Gold. "Gambling and Problem Gambling Prevalence among Adolescents in Florida." Gainesville, FL: University of Florida, 2002.

Georgia

Emshoff, Jim, Elizabeth Anthony, Caroline Lippy and Leanne Valentine. "Gambling Report for the Georgia Department of Human Resources." Atlanta, GA: Georgia State University, Department of Psychology, 2007.

* Emshoff, Jim, Eddlemon, K. Broomfield and Mohar. "Treatment of Pathological Gambling: A Review of the Literature." Atlanta, GA: Georgia State University, Department of Psychology, 2000.

Volberg, Rachel A. and Jacqueline Boles. "Gambling and Problem Gambling in Georgia." Roaring Spring, PA: Gemini Research, 1995.

Iowa

Volberg, Rachel A. "Gambling and Problem Gambling in Iowa: A Replication Study." Roaring Spring, PA: Gemini Research, 1995.

Minnesota

Emerson, Michael O., J. Clark Laudergeran and James M. Schaefer. "Adult Survey of Minnesota Problem Gambling Behavior; a Needs Assessment: Changes 1990 to 1994." Duluth, MN: Center for Addiction Studies, University of Minnesota, Duluth, 1994.

* Laudergeran, J. Clark, James M. Schaefer, K. Eckhoff and P. Pirie. "Adult Survey of Minnesota Gambling Behavior." Duluth MN: Center for Addiction Studies, University of Minnesota, Duluth, 1991.

Louisiana

Esters, Irv, Raymond Biggar, John Lacour and Maria Reyes. "2008 Louisiana Study on Problem Gambling." Lafayette, LA: Cecil J. Picard Center for Child Development, University of Louisiana at Lafayette, 2008.

* Volberg, Rachel A. "Wagering and Problem Wagering in Louisiana. Report to the Louisiana Economic Development and Gaming Commission." Roaring Spring, PA: Gemini Research, 1995.

Vogel, Ronald J. and Phillip Ardoin. "Gambling in Louisiana: 2002 Louisiana Study of Problem Gambling." Baton Rouge, LA: Nelson Mandela School of Public Policy, Southern University, 2002.

Volberg, Rachel A. and W. Lamar Moore. "Gambling and Problem Gambling in Louisiana: A Replication Study, 1995 to 1998." Northampton, MA: Gemini Research, 1999.

Montana

"Montana Gambling in a National and Global Context." 1998.

Volberg, Rachel A. "Gambling Involvement and Problem Gambling in Montana." Albany, NY: Gemini Research, 1992.

North Dakota

- Volberg, Rachel A. "Gambling and Problem Gambling in North Dakota: A Replication Study, 1992 to 2000." Northampton, MA: Gemini Research, 2001.
- * Volberg, Rachel A. and E. Silver. "Gambling and Problem Gambling in North Dakota." Northampton, MA: Gemini Research, 1993.

New York

- Volberg, Rachel A. "Gambling and Problem Gambling in New York: A 10-Year Replication Survey, 1986 to 1996." Roaring Spring, PA: Gemini Research, 1996.
- * Volberg, Rachel A. "Compulsive Gambling Treatment Program Evaluation: Final Report." Gemini Research, 1988.

Oregon

- Carlson, Matthew J. and Thomas L. Moore. "Adolescent Gambling in Oregon: A Report to the Oregon Gambling Addiction Treatment Foundation." New Brunswick, NJ: Institute of Health, Health Care Policy, and Aging Research, Rutgers University, 1998.
- Moore, Thomas L. "The Prevalence of Disordered Gambling among Adults in Oregon: A Replication Study." Portland, OR: Oregon Gambling Addiction Treatment Foundation, 2006.
- Volberg, Rachel A. "Changes in Gambling and Problem Gambling in Oregon: Results from a Replication Study, 1997 to 2000." Northampton, MA: Gemini Research, 2001.
- Volberg, Rachel A. "Gambling and Problem Gambling in Oregon." Northampton, MA: Gemini Research, 1997.
- Volberg, Rachel A., Eric C. Hedberg and Thomas L. Moore. "Oregon Youth and Their Parents: Gambling and Problem Gambling Prevalence and Attitudes." Northampton, MA: Gemini Research, 2008.

South Dakota

- * Volberg, Rachel A. and Randall M. Stuefen. "Gambling and Problem Gambling in South Dakota." Gemini Research, 1991.
- Volberg, Rachel A. and Randall M. Stuefen. "Gambling and Problem Gambling in South Dakota: A Follow-up Survey." Northampton, MA: Gemini Research, 1993.

Texas

- Wallisch, Lynn S. "1992 Texas Survey of Adolescent Gambling Behavior." Austin, TX: Texas Commission on Alcohol and Drug Use, 1993.
- * Wallisch, Lynn S. "Gambling in Texas: 1992 Survey of Adult Gambling Behavior." Austin, TX: Texas Commission on Alcohol and Drug Abuse, 1993.
- Wallisch, Lynn S. "Gambling in Texas: 1995 Surveys of Adult and Adolescent Gambling Behavior." Austin, TX: Texas Commission on Alcohol and Drug Abuse, 1995.

Washington

- * Volberg, Rachel A. "Gambling and Problem Gambling Among Adolescents in Washington State." Northampton, MA: Gemini Research, 1993.
 - * Volberg, Rachel A. "Gambling and Problem Gambling in Washington State." Northampton, MA: Gemini Research, 1993.
- Volberg, Rachel A. and W. Lamar Moore. "Gambling and Problem Gambling among Adolescents in Washington State: A Replication Study, 1993 to 1999." Northampton, MA: Gemini Research, 1999.
- Volberg, Rachel A. and W. Lamar Moore. "Gambling and Problem Gambling in Washington State: A Replication Study, 1992 to 1998." Northampton, MA: Gemini Research, 1999.

Appendix V: 2013 Florida Gaming Survey

As noted in Chapter IV of Part 1B of this report, The Eric Friedheim Tourism Institute at the University of Florida conducted a study on behalf of Spectrum Gaming Group and the Florida Legislature to explore consumer attitudes, perceptions, and intentions toward the current gambling landscape and potential changes in the state's gambling industry. The quantitative consumer survey provided insights and data for the analysis found in Chapter IV.

Spectrum and the University of Florida believe that the survey provides valuable insights into the attitudes, perceptions and intentions toward gambling in Florida that should be considered as the Legislature and other Florida stakeholders consider possible changes to the gambling landscape in the state.

The survey is presented in its entirety at the end of this combined report document.

PART 2

I. Introduction

The purpose of Part 2 of this study is to examine statistical relationships among economic outcomes and the expansion of gambling in Florida. Although there are any number of scenarios of gambling policy that could be implemented in the state (including the status quo), in this part of the study our consideration focuses on the introduction of destination resort casinos and the introduction of slot machine casinos at existing pari-mutuels in Florida.

Our analysis includes several key economic variables including number of people employed, average wages, and the number of establishments operating. We examine these variables for several different industry classification groups in order to predict likely impacts of casino expansion in Florida. At the outset, it should be emphasized that making predictions about the future values of economic variables is an exercise that is based on a variety of assumptions which, if they were slightly modified, could result in starkly different conclusions. Nevertheless, the information provided by the analysis can be informative to policymakers and voters interested in more information on the possible impacts of casino expansion in Florida.

Background

It should be emphasized that a significant portion of the work for this part of the study occurred prior to the actual writing of the report. The development of the Work Plan, in response to the state's directed tasks, involved a considerable amount of effort. This is because we first had to familiarize ourselves with different studies that had been conducted previously, their results, the problems their researchers encountered, and the limitations of their analyses. After consideration of these factors, and given the requirements outlined by the State of Florida for this part of our study, we developed the Part 2 Work Plan.

It became obvious that one of the key limitations to being able to perform the "ideal" analysis is that there is no known dataset that identifies an annual (or quarterly) list of counties in which casinos are operating. Such a dataset does exist for 1990-96, and has been used in a study which is similar to the study we are performing here. Updating this dataset would have taken an enormous amount of time, and could not be done without an army of staff working to manually collect data on all 1,000+ casinos currently operating in the United States.

Since we are able to utilize a previously published study as a foundation for this analysis, we believe the projections and conclusions drawn in this study represent the best type of analysis that can be done for Florida, given data availability and the state of knowledge among academics on the economic impacts of legalized gambling.

Preview of Data and Analysis

Numerous economic and social impacts have been discussed previously in Parts 1A and 1B of this study, with a focus on REMI's state-level analysis. Here we focus on several very specific economic variables at a more local (i.e., county) level. By utilizing the available county-level data, we are able to provide a more micro-picture of the likely impacts of casino expansion in Florida. Our key variables are:

- Number of people employed
- Average weekly wages
- Number of establishments

These data are collected at the county-level, for the following industry classifications, based on the North American Industry Classification System (NAICS):

- All industries
- Leisure and hospitality
- Other services (not otherwise classified)

In order to forecast changes in these variables, we rely on a previous study that has estimated the county-level impacts on employment and wages from the introduction of casinos. We also incorporate information from peer counties outside of Florida. We use information on how such variables changed in the peer counties, after the introduction of casinos, to predict the likely impact on Florida counties from the same.

In addition to the county-level analyses described above, this study also includes analysis from REMI, at the state-level, from Part 1B of this study, to estimate state-level impacts on variables such as Gross State Product, total employment, employment by industry, state tax revenues, and wages and salaries.

This analysis should provide a comprehensive picture of the expected micro-level economic impacts of casino and slot machine expansion in Florida, as well as an overview of the likely macro (i.e., state-level) impacts on key economic variables.

Scope

This report is Part 2 of the three-part gaming study commissioned by the Florida Legislature: *Statistical Relationships Between Gaming and Economic Variables for Communities*.

Following is the assigned scope of Part 2, as published in the State's Invitation to Negotiate:

1. The report shall include a statistical analysis of relationships among economic outcomes with the unit of observation being counties nationwide where new gaming facilities have opened and operated.

- a. The estimated parameters shall include standard measures such as employment, wages, and tax revenue and other measures, and their association with the presence and economic scale of gaming.
 - b. The analysis will be county-specific in nature, using data for the 3000+ counties in the U.S., and it will control for their economic and demographic characteristics when performing statistical estimation of the effects of opening and operating gaming facilities.
 - c. A panel dataset shall be constructed that incorporates different opening dates of gaming facilities and can be used to estimate impacts of gaming activity on performance of the economy.
 - d. The output from this statistical modeling process will be the basis for presenting likely incremental economic impact to the State of the opening and operation of gaming facilities in the scenario described above.
2. A second statistical analysis shall be undertaken if data allow. This second analysis will be geospatial in nature, and will examine changes in local business structure associated with the opening and operation of gaming facilities.
- a. Geospatial data such as the NETS database or similar datasets that incorporate business location will be used to assess the composition of businesses that operate in geographical proximity to gaming facilities.
 - b. The study will assess how that composition differs from the overall business composition of a county and its peer counties and how that structure changes upon introduction and operation of gaming facilities.
 - c. The geospatial analysis will use various North American Industry Classification (NAICS) codes and suitable levels of aggregation to assess differences in business structure among geographically proximate businesses before and after opening and operation of gaming facilities.
 - d. Variables to be presented in the analysis shall include employment and wage change in the vicinity of the casino and in the host county.

By agreement with Legislative staff, Part II, sec. 2 above was not performed.

Spectrum employed six project professionals for this combined report, all of whom are staff experts or associates, assisted by support staff as needed. Our team included Dr. Douglas Walker, Professor of Economics at the College of Charleston and author of *Casinonomics: The Socioeconomic Impacts of the Casino Industry* and numerous other gambling industry-related publications. The Spectrum team relied on publicly available data, as well as data requested from gambling operators and government sources, interviews with various Florida stakeholders (in person, by telephone and by email), existing documents and research reports, and our collective expertise in having studied gambling for more than three decades.

As we did with the Part 1, Section A, report, we teamed with Regional Economic Models Inc., a globally respected economic modeling firm based in Amherst, MA, that works with numerous state governments, including the State of Florida. REMI's goal in this report was to use the information developed by the other team members to estimate the economic impacts of the various gaming scenarios developed by the State. REMI relied on its expertise to prepare the data for input into its Tax-PI model.

II. Literature Review

As was noted in the discussion in Part 1B of this study, the literature on the costs of legalized gambling and gambling disorders is not very well developed. One fairly comprehensive discussion of the “early” literature in this area is the National Research Council’s (“NRC”) book.¹ We noted in the discussion of social costs that the NRC was critical of the state of research on gambling, as of 1999. There has not been enormous improvement in research on social costs. In addition, the NRC notes that there has not been much good research on economic impacts such as employment, wages, and economic growth and development. The NRC does note several large policy reports that were seen at the time as being relatively good. These included studies on casinos in Wisconsin, South Dakota, Florida, and Australia.²

A general concern about the studies reviewed by the NRC is that, in most cases, the studies were policy reports for organizations or government agencies which may have an interest in finding one outcome or another. Most of the studies discussed by the NRC did not undergo a peer review, which is one advantage of relying on academic studies published in peer-reviewed journals. We focus our discussion of background research on selected papers published in such journals.

Early Studies

As will be seen in this review, even the early academic literature on economic impacts of casinos in the United States was, for the most part, of questionable quality. This is because casinos began expanding outside Nevada and New Jersey online in the early 1990s. So research published in the mid-1990s would have relied on very limited data. As a result, such studies have very limited useful empirical research and questionable conclusions. The research that has been published beginning in the late 1990s represents a significant improvement in quality. We begin the review with general and theoretical discussions about the economic impacts of casinos. Later we discuss more recent, empirical research.

Consider, for example, the paper by Robert Goodman.³ Goodman’s work received an enormous amount of attention in the mid-1990s because it was some of the first research published on the economic and social impacts of legalized casinos. His 1995 paper summarizes his 1994 study, which was later published as a trade book.⁴ Among the findings of his study,

¹ National Research Council, *Pathological Gambling: A Critical Review* (Washington, DC: National Academies Press, 1999).

² See *Ibid.*, p. 174-185.

³ Robert Goodman, “Legalized Gambling: Public Policy and Economic Development Issues,” *Economic Development Review*, Volume 13, 1995, p. 55-57.

⁴ See Robert Goodman, *The Luck Business: The Devastating Consequences and Broken Promises of America’s Gambling Explosion* (New York, NY: The Free Press, 1995).

Goodman notes, “[Casino] expansion has produced increases in employment and tax revenues, but the shift of consumer spending to gambling significantly cannibalizes existing local businesses...” The basic argument here, which has been repeated in a number of subsequent studies, is that casinos generally do not create net employment benefits because the jobs created simply come at the expense of other, competing industries in the local economy. Yet, Goodman presents little empirical support for his claims. However, given the lack of data at the time, Goodman did raise concerns about uncertainty as to the economic impacts of legalized gambling. Although Goodman’s research did little to provide answers, he did raise a number of important questions.

William Eadington published an article about casinos and economic development in the same issue of *Economic Development Review* as Goodman’s article.⁵ Eadington explained the fundamental economic perspective on casino economics. He explained that to the extent that a casino can draw tourists from outside the local region, the economic benefits to the region are more pronounced, compared to a situation when the casino serves a more local clientele:

If a casino is purely a tourist facility – if all casino patrons come from outside the jurisdiction – then the facility is effectively exporting casino services. As a result, all revenues generated within the casino, all jobs created within the casino, can be classified as “exports” and will stimulate, via the multiplier process, additional economic activity in the jurisdiction. This is one of the reasons for the success of Las Vegas.⁶

Eadington seems to support Goodman’s cannibalization argument, noting that:

At the other extreme, locations or regions which have casinos that cater predominantly to local or regional residents will not have a stimulative effect on the region’s economy. In effect, customers to such casinos would just be redirecting their expenditures from other goods and services provided within the region to the casinos. Thus, jobs created and revenues generated in the casinos would be offset by jobs lost and revenue shortfalls elsewhere in the region. One exception to this guideline is with regard to “import substitution.” If the presence of casinos in the region allows regional residents to gamble at local casinos rather than becoming tourists to casinos in other regions, the economic impact from spending so generated is the same as it would be for tourists.⁷

As a result, Eadington suggests that urban casinos will have very different impacts from destination resort casinos in less populated areas. He notes that “most of the customers will be drawn from the local or regional market. Thus, there is less of an ‘export’ effect from spending in the casino, and there is therefore little economic stimulus to the metropolitan area.”⁸

⁵ William R. Eadington, “Economic Development and the Introduction of Casinos: Myths and Realities,” *Economic Development Review*, Volume 13, 1995, p. 51-54.

⁶ *Ibid.*, p. 52.

⁷ *Ibid.*

⁸ William R. Eadington, “Economic Development and the Introduction of Casinos: Myths and Realities,” *Economic Development Review*, Volume 13, 1995, p. 53.

This suggestion appears to be confirmed by evidence from Mississippi in the early 1990s, just after riverboat casinos were legalized in the state. Walker summarizes a discussion by the Chamber of Commerce director from Tunica, who explains the effect casinos had on his community⁹:

In January 1992, per capita income in the county was \$11,865; ...53 percent of residents received food stamps ... Since casinos have been legalized, however, land once valued at \$250/acre now sells for \$25,000/acre... Because of the increased government revenues, property taxes have been lowered 32 percent in recent years... Unemployment has dropped to 4.9 percent... The number of welfare recipients has decreased 42 percent; the number of food stamp recipients has decreased by 13 percent... In 1994 the county recorded the highest percentage increase in retail sales of all Mississippi counties: 299 percent.

There is little doubt that casinos had a positive economic impact in Tunica and in other relatively poor communities in the state. However, it is unclear whether such benefits continue to accrue as casinos have spread across the United States. In the early 1990s, Mississippi casinos could be seen as significant regional tourist attractions. But now, it is not clear how far people will travel to go to those casinos, as they may have closer options.

These suggestions from Goodman and Eadington are in line with how many researchers and politicians view the likely economic impacts of casinos. It would seem to make sense that the economic impacts of casinos, in terms of employment, wages, and economic growth, would be larger in more rural locations than urban ones. Of course, this is probably the case with any business, simply because in a more populous area, any particular firm of a given size will be smaller relative to the local economy.

However, some authors have questioned this conception of casinos as being beneficial only to the extent that they attract tourists and do not compete with other industries. Detlefsen writes,

Invocation of the substitution effect in this context not only presumes a static, zero-sum economy in which no business can grow except at the expense of other firms. It mistakenly implies that certain types of commercial activities, such as casino gambling, create no new “real” wealth and provide no “tangible” products of value. That view overlooks the key point that all voluntary economic exchanges presumably are intended to improve the positions and advance the preferences of *both* parties (in other words, improve their social welfare). That the gains from such exchanges (particularly in a wealthier, service-oriented economy in which a greater portion of disposable income is consumed for recreational activities) are not easily quantifiable in every case is beside the point. After all, the only true measure of the value of entertainment-oriented goods and

⁹ Douglas M. Walker, *Casinomics* (New York, NY: Springer, 2013), p. 10.

services in the diverse US economy ultimately remains in the spending preferences expressed by individual consumers.¹⁰

Walker (2013, p. 26) argues that industry cannibalization (or the “substitution effect”) is essentially just market competition, and exists for most industries.¹¹ Most people do not have concern about “substitution” or “industry cannibalization” when a new restaurant opens in town. Perhaps the difference is that casino openings are the direct result of government action (legalization and issuing a casino permit), whereas the opening of most other types of business is routine and relatively unregulated.

In any case, the “industry cannibalization” argument about casinos, which essentially suggests that there will be no net employment changes as the result of casino introduction, was pervasive in the literature. Walker cites the following studies which he claims essentially support this view of casinos: Gazel and Thompson,¹² Goodman,¹³ Grinols,¹⁴ Grinols and Mustard,¹⁵ and Kindt.¹⁶

In his 2004 book, Grinols presents a different version of this theory of casino impacts.¹⁷ However, he discusses in more detail the relationship between economic growth and employment. First, Grinols defines economic development as relating directly to residents’ “welfare” or well-being. So economic activity results in economic development, whether or not it results in a net increase in local employment, as long as it increases welfare.¹⁸ While often

¹⁰ Robert Detlefsen, “Anti-gambling Politics – Time to Reshuffle the Deck” (Washington, DC: Competitive Enterprise Institute, 1996).

¹¹ Douglas M. Walker, *Casinonomics* (New York, NY: Springer, 2013), p. 26.

¹² Ricardo Gazel and William Thompson, “Casino Gamblers in Illinois: Who are They?” Las Vegas, NV: UNLV Working Paper, 1996.

¹³ Robert Goodman, *The Luck Business: The Devastating Consequences and Broken Promises of America’s Gambling Explosion* (New York, NY: The Free Press, 1995).

¹⁴ Earl L. Grinols, “Gambling as Economic Policy: Enumerating Why Losses Exceed Gains,” *Illinois Business Review*, Volume 52, 1995, p. 6-12.

¹⁵ Earl L. Grinols and David B. Mustard, “Business Profitability Versus Social Profitability: Evaluating Industries with Externalities, the Case of Casinos,” *Managerial and Decision Economics*, Volume 22, 2001, p. 143-162.

¹⁶ John W. Kindt, “The Economic Impacts of Legalized Gambling Activities,” *Drake Law Review*, Volume 43, p. 51-95.

¹⁷ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004).

¹⁸ *Ibid.*, p. 55.

economic growth is accompanied by increases in employment, it is not necessarily the case.¹⁹ Economic development may even occur when there is a net decrease in employment.

Grinols provides an intuitive explanation for the substitution (i.e., cannibalization) effect, focusing on employment. He suggests that the employment impacts of casinos can be likened to the impacts of “factories,” “restaurants,” or “tollhouses.”²⁰ For example, if a casino attracts most of its patrons from outside the local area, say from across the country, then it acts similar to a factory, exporting most of its product. He explains,

New money is brought in from buyers outside the area and the revenues are used to pay local workers’ wages, suppliers, and owners’ profits. This money, in turn, is recycled by being spent in the region. Secondary suppliers arise to serve the secondary demands. New local jobs are created – both directly at the factory and in the secondary sectors. These represent a true net increase in local employment. A variant of the factory is a business that serves local demand that would have flowed to outside had the local factory not been present. Meeting demand that might otherwise have been met by imports is called import substitution. Import substitution also leads to a net increase in local jobs compared to the no-factory alternative.²¹

This example would seem to describe Las Vegas quite well, and perhaps a few other markets during the 1990s (e.g., the Mississippi gulf coast and Atlantic City). However, with the proliferation of casinos, there may be few “factory” markets other than Las Vegas.

Another category described by Grinols is “restaurants,” which characterizes casinos in many jurisdictions. Grinols writes,

A restaurant generally serves local residents and existing tourists. Adding another restaurant to a town that already has many increases employment in the new restaurant but does not increase total employment. Because no new dollars are attracted from the outside, the restaurant redistributes money within the local economy: increased demand at one location comes at the expense of demand at another.²²

The third category Grinols describes is the “tollbooth,” in which the

... firm collects money from local buyers and those outside the region, but the positive effect is negated because an equally large or larger flow of money goes out. The net effect is that the local economy is reduced to the role of being a collection booth for the industry. The impact could either be to expand or to shrink the local economy.²³

¹⁹ Earl L. Grinols, *Gambling in America: Costs and Benefits* (New York, NY: Cambridge University Press, 2004), p. 60-63.

²⁰ *Ibid.*, p. 67-69.

²¹ *Ibid.*, p. 68.

²² *Ibid.*, p. 67-68.

²³ *Ibid.*, p. 68.

Grinols' scenarios seem generally to be consistent with both Goodman's and Eadington's conception of casinos and employment. However, Grinols' discussion of spending and jobs suggests that there are relatively few cases in which casinos could have a positive impact on the local economy.

Walker argues that Grinols' discussion, and the cannibalization argument generally, ignores the fact that spending at a new business, even if the spending comes entirely from local residents, can increase welfare.²⁴ Indeed, even using Grinols' factory-restaurant classification, one would expect the new option for consumers (i.e., additional variety for spending options) to increase their well-being. As Grinols himself notes, economic development depends on well-being, not necessarily only on employment. In addition, one could argue that, even if there is no net change in overall employment after the opening of a casino, since the jobs are producing in firms that are seeing increased demand/expenditures, then the jobs are higher-valued, from a societal/economic perspective.

Although there is a somewhat well-developed literature on the substitution/cannibalization effect, overall there is little empirical evidence on either side of the debate.

Recent Studies

We now examine studies that provide more empirical evidence on the economic impacts of casinos than some of the studies discussed above. In their comprehensive book on gambling, Morse and Goss analyze county-level employment and per capita income.²⁵ They present changes in county employment and per capita income, depending on whether a casino was introduced in the county in 1993 or 1994. Changes are shown for 1995-2002.

Figure 1: US county-level changes in employment and income

County-Type	1995-2002 Change in County-Level...	
	Employment	Per Capita Income
Non-casino counties	11.3%	32.8%
Native American casino counties	23.8%	33.3%
Commercial casino counties	6.7%	31.7%

Source: Morse and Goss (2007, p. 60)

Morse and Goss explain that factors other than the existence of a casino could, of course, be explaining the changes shown above. Therefore they perform a regression analysis which accounts for a variety of other characteristics in the counties. The results can be seen as a truer

²⁴ Douglas M. Walker, *Casinonomics* (New York, NY: Springer, 2013), p. 29.

²⁵ Edward A. Morse and Ernest P. Goss, *Governing Fortune: Casino Gambling in America* (Ann Arbor, MI: University of Michigan Press, 2007), p. 59.

representation of the impacts of casinos on employment and per capita income. Their regression results are reproduced in the table below.²⁶

Figure 2: Change in economic factors after 15 years of casino operation

	Compound Annual Change in Per Capita Income	Compound Annual Change in Employment	Change in Unemployment Rate
Commercial casino counties	3.0%	4.2%	-1.0%
Native American casino counties	2.7%	4.1%	-0.9%
Non-casino counties	3.2%	1.7%	-0.4%

Source: Morse and Goss (2007), p. 66.

Their analysis indicates that per capita income growth (i.e., economic growth) is actually lower in casino counties (both Native American and commercial) than in non-casino counties. However, employment increases at a greater rate in casino counties, and the unemployment rate decreases more in casino counties than in non-casino counties. Obviously, the results show that employment tends to increase as a result of casinos being introduced, but per capita income does not increase as fast in casino counties as in non-casino counties. There is no obvious explanation for why this might be the case. Nevertheless, this is interesting empirical evidence based on casino adoptions that occurred in the early 1990s.²⁷

Although the Morse and Goss results suggest casino counties may not see the economic growth seen in non-casino counties, a forthcoming research paper has found a positive effect of casinos on state-level economic growth (per capita personal income). The study by Walker and Jackson²⁸ examined personal income and casino revenue data from twelve states with commercial casinos, from 1990-2010. (As many studies do, this study excluded Nevada and New Jersey data.) The results indicate a Granger-causal relationship between casino revenues and personal income. Granger causality does not prove one variable causes another. Rather, it indicates that one variable helps in the prediction of the second variable. If the first variable is helping to explain the second one, then it suggests a “causal” type relationship between the two variables.

In a recent in-depth study of the impacts of Canadian casinos on local employment and wages, Humphreys and Marchand found positive local labor market effects:

The direct labor market growth in the gambling industry shows that areas with new casinos experience large, positive employment and earnings growth within one to five

²⁶ Edward A. Morse and Ernest P. Goss, *Governing Fortune: Casino Gambling in America* (Ann Arbor, MI: University of Michigan Press, 2007), p. 66.

²⁷ It should be noted that their analysis excluded counties in Nevada and New Jersey, so that they would not unduly influence the results (Morse and Goss, 2007, p. 60).

²⁸ Douglas M. Walker and John D. Jackson, “Casinos and Economic Growth: An Update,” *Journal of Gambling Business and Economics*, 2013 (forthcoming). Available at <http://walkerd.people.cofc.edu/pubs/2013/GrowthUpdate.pdf>.

years following the opening of a casino. However, this growth was insignificant for areas with existing casinos, suggesting that the local effects of new casinos do not extend beyond five years.²⁹

They caution policymakers considering the introduction of casinos in order to boost employment:

The evidence presented in this paper suggests that a skeptical approach be taken regarding the use of employment and earnings gains to justify the legalization of expansion of casino gambling within a locality. Any expectations of new jobs or earnings enhancement should be considered short-term and narrowly-focused within the gambling and hospitality industries. Broad employment and earnings gains in other local industries outside of gambling and hospitality should not be expected.³⁰

The paper by Hashimoto and Fenich³¹ is somewhat similar to the analysis we will perform later in this study. These authors examined county-level changes in employment, number of establishments, and annual payroll in several Mississippi counties. For the most part, they found that the introduction of casinos led to an increase in all three variables, which raises questions about the validity of the “substitution effect”:

In the four different counties in Mississippi, the legalization and subsequent development of casino gaming did not drive all the local restaurants out of business. Casinos did not cause the predicted drop in the number of businesses, nor the drop in people employed, nor the drop in payroll. In fact, just the opposite occurs.

They point out that these results do not include the restaurants offered on casino properties, and argue that the casinos have quite clearly had a positive economic impact in Mississippi. However, it is worth noting that in some of the counties studied, there was not a lot of economic activity prior to the casinos being built. In Tunica, for example, there were only 8 or 9 restaurants prior to the opening of a casino. It would be difficult to imagine a new casino, with the traffic it would generate, would harm the few incumbent restaurants. Yet, the same results were found in counties with 40-60 establishments.

The study by Garrett examines selected casino counties in Mississippi, Illinois, Iowa, and Missouri.³² Garrett notes that most previous studies (that he reviewed, from the 1990s) have

²⁹ Brad R. Humphreys and Joseph Marchand, “New Casinos and Local Labor Markets: Evidence from Canada,” University of Alberta working paper, June 2013, p. 27. Available at <http://www.economics.ualberta.ca/~media/economics/FacultyAndStaff/WPs/WP2012-16-Humphreys-Marchand>.

³⁰Ibid., p. 28.

³¹ Kathryn Hashimoto and George G. Fenich, “Does Casino Development Destroy Local Food and Beverage Operations?: Development of Casinos in Mississippi,” *Gaming Law Review*, Volume 7, 2003, p. 101-109.

³² Thomas A. Garrett, “Casino Gaming and Local Employment Trends,” *Federal Reserve Bank of St. Louis Review*, Volume 86, 2004, p. 9-22.

found a positive impact of casinos on employment.³³ Garrett's analysis tracks total employment before and after casino introduction, so that he is able to forecast what employment would have been had casinos not been introduced. He also analyzes payrolls before and after casino openings.

Garret finds positive impacts of casinos on employment and payrolls in three of the four rural counties he studied.³⁴ He also notes that pinpointing the impacts of casinos in metropolitan areas is more difficult, since the casino represents a small proportion of the overall economy, relative to a casino in a rural area. This idea is supported by other research, discussed above.

One important point that Garrett makes that is relevant for our analysis of Florida is that studying the employment impacts of casinos at a county level requires the researcher to pay careful attention to interpreting changes in the variables, especially in rural counties. For example, when a casino opens in a rural county, county employment certainly increases, perhaps dramatically so. But this change would not necessarily imply that employment among county residents has increased. It may instead indicate that a lot of people from other counties are getting jobs at the casino. This issue is less likely to arise in an urban setting, as the opening of a casino is unlikely to attract a large number of people seeking employment from outside the area, at least relative to a rural setting.

Summary

Despite the spread of casinos across the United States, and in many other countries, there have still been relatively few empirical analyses of the economic impacts of casinos. This is somewhat surprising, given that in the past decade there have been several new academic journals started that focus entirely on gambling issues. Most of the research on gambling focuses on pathological gambling (diagnosis, prevalence, and treatment).

Although the literature review above is not exhaustive, the available evidence seems to support the idea that casinos have at least modestly positive impacts on local employment, wages, and economic growth. Contrary to casino critics' claims, there does not seem to be empirical evidence to support the "substitution effect" argument that is so commonly raised in public and academic debates over casinos.

In the following sections, we will review a key study in the literature from which we will adapt our analysis to follow. The 2008 study by Cotti appears to be the most authoritative study on the employment and wage issue to date.

³³ Thomas A. Garrett, "Casino Gaming and Local Employment Trends," *Federal Reserve Bank of St. Louis Review*, Volume 86, 2004, p. 13.

³⁴ *Ibid.*, p. 21.

III. Foundation for Florida Analysis: Cotti's 2008 Study

As we explained in the background section of this report, the development of the plan for analysis was time consuming because we had to determine the best way to analyze the likely economic impacts of expanded gambling on Florida, given very limited data at a county-level. The one study that provides the most guidance, and frees us from having to “reinvent the wheel,” is the study by Cotti.³⁵ That study is certainly the most comprehensive published study on the employment and wage impacts of casinos in the United States. Cotti's paper estimates county-level impacts for all industries, as well as for the entertainment/hospitality sector, to give a general picture of the economic impacts of casinos.

Cotti discusses the cannibalization issue that was discussed earlier in this report. A casino which creates a large “substitution effect” and therefore reduces employment in other industries could lead to decreased employment in a county. Alternatively, if there are industries that are complementary to casinos that thrive after the introduction of a casino, more than offsetting any substitution with other industries, then the casino will lead to a net increase in county employment.

Overall, Cotti finds that “casino introduction increases aggregate employment in host communities relative to counties without a casino” (p. 18). Important details of the findings include:

- Benefits are focused in the entertainment sector (of which the casino industry is part)

Intuitively, we would expect that the economic impacts of casinos, particularly with respect to employment and wages, should be more pronounced when considering industries that are most closely related to the casino industry. For example, if casinos largely cannibalize other entertainment firms, then we should see little net job creation when a casino is opened. But we might not expect a new casino to have much of an effect on employment in the auto-repair industry, for example, because there is really no direct link between the two industries. The choice of industries should be based on the goal of capturing those most closely related to the casino industry.

- The strongest impacts are found in low-population counties

Whatever the impact a new casino has on employment and wages, we should expect those impacts to be most pronounced in smaller jurisdictions. The logic is obvious. Suppose a casino hires 1,000 employees. When the employment and wage impacts work their way through a county with only 5,000 residents, the impacts will be relatively large, in proportion to the

³⁵ Chad D. Cotti, “The Effect of Casinos on Local Labor Markets: A County Level Analysis,” *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 17-41.

county overall. On the other hand, a casino hiring 1,000 employees in a county that is home to 1 million people would be unlikely to have a noticeable impact on the local economy.

- Aggregate employment is affected little in neighboring jurisdictions

This indicates that there is not a measurable impact outside the casino county, suggesting that most of the impacts are localized and occur in the immediate vicinity of the casino. This makes intuitive sense, as it may be difficult for individuals to travel to an adjacent county for a job without moving their household. Of course, there are likely to be many individual exceptions to this, but Cotti's analysis suggests that, on average, the economic impacts of a casino largely remain within a county.

In addition, there are some data limitations and caveats from the Cotti study which should be noted:

- The analysis does not account for casino sizes

This is an issue initially raised in Walker's 2008 critique of Grinols and Mustard's analysis of casinos and crime at the county level.³⁶ The Cotti study utilizes the casino existence data from Grinols and Mustard's 2006 study. Specifically, the data used in the Cotti study identifies years in which a casino existed in a particular county, for all US counties (quarterly, from 1990-96). Since the data set does not account for the sizes of casinos, or how many casinos there are in a county, the analysis is not particularly sensitive to the volume of gambling in the county. This is a serious limitation of the analysis, as we would expect that employment and wage impacts from casinos would certainly be sensitive to the size of the industry. Unfortunately, there is no known dataset of casino volume by county for the United States, so the data used by Cotti is still the best available, to our knowledge. According to our interview with Chad Cotti, it would be a very serious undertaking to update and expand this dataset, since it would require recording the opening data of 1,000+ casinos in the country.³⁷ Measuring casino size would be an overwhelming task, even for a large staff, as it would require that all casino expansions, closures, and openings be accounted for.

- The QCEW data do not distinguish between part-time and full-time employees

Cotti notes that this is an unfortunate limitation of the data.³⁸ In addition, the data do not track number of hours worked. Nevertheless, the data include number of people employed and average weekly wages, so they still provide a good picture of the labor market in each county.

³⁶ Douglas M. Walker, "Evaluating Crime Attributable to Casinos in the U.S.: A Closer Look at Grinols and Mustard's 'Casinos, Crime, and Community Costs'," *Journal of Gambling Business and Economics*, Volume 2, p. 23-52.

³⁷ Phone interview with Chad Cotti by Douglas M. Walker, August 24, 2013.

³⁸ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 22.

Cotti's Data

Cotti utilizes data from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW). The QCEW provides county-level payroll data in narrowly-defined industries. "The industrial sector of all firms in the data is coded according to the North American Industrial Coding System (NAICS), and aggregations of the data by county, industry, and quarter are available to users, beginning with the initial data collection for the first quarter of 1990."^{39, 40}

The data are collected from employers' paperwork related to the unemployment insurance program. Cotti notes that the data are comprehensive,

All firms with workers subject to state and federal unemployment insurance laws are represented in the data, which, according to the Bureau of Labor Statistics (BLS), covers 99.7 percent of all wage and salary civilian employment.⁴¹

Cotti collected employment and wage data for 28 quarters (1990-1996) on all counties in the United States, with the exception of Nevada and New Jersey. (These states are omitted because they have mature casino industries and Cotti did not want them to unduly influence his results.) Since Cotti's empirical analysis is based on the employment and wage data for most counties in the United States, it helps ensure that our use of his results in our own estimation uses information from all US counties (as required in the State of Florida's Project Plan), except for Nevada and New Jersey. Counties in these states were omitted from the study so that they did not unduly influence the results. In total, Cotti's data includes 600,000 quarterly observations on employment and wages for county-level sectors,⁴² making it the most comprehensive published study (to our knowledge).

Cotti analyzes the effect of casinos opening in counties on employment and wage data. To do this, he utilizes a dataset that indicates the period in which each casino opened in each county in the United States, from 1990-96. His data includes 161 counties that had casinos open within their borders during his sample period.⁴³ By including a variable representing the

³⁹ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 22.

⁴⁰ Because the QCEW data are based on data categorized by NAICS, we utilize the QCEW data for the analysis of number of establishments for the geospatial analysis discussed below.

⁴¹ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 22. For more information on the QCEW data, see www.bls.gov/cew/cewover.htm. These data serve as the foundation for a wide variety of federal government statistics on employment and wages.

⁴² Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 23.

⁴³ Cotti also analyzes the casino impact on counties that neighbor casino counties. However, he finds minimal impact on counties adjacent to casino counties (p. 37).

existence of a Native American or commercial casino in counties, Cotti is able to isolate the economic impacts that casinos have in counties across the United States.⁴⁴

Aside from the data on casino openings and county-level employment and wages, Cotti also utilizes a variety of other demographic variables that are typically included in econometric studies of this sort. They include: county population, unemployment rate, percentage of population that is white, and percentage of population that is female.⁴⁵

We utilize Cotti's analysis and results to estimate the likely impacts of casinos in Florida. There are several key benefits to this approach:

- Cotti's study uses the latest known dataset on casino opening dates at the county level.
- It is an efficient option for analyzing the economic variables of interest, since the data collection for all casinos in the United States would take significant time and expense, and could not be done under the time constraints and budget for the current study.
- There is no fundamental reason why the relationship between casinos and county-level economic variables should have changed significantly over time, and, in particular, between the time Cotti's study was published in 2008, and currently.⁴⁶ Cotti's sample period is from 1990-96, a period of significant expansion of casinos in the United States. The US landscape during that period is similar to the casino gambling landscape in Florida and the southeast region, as neither neighboring state has significant gambling opportunities for consumers. Therefore, the results based on Cotti's analysis may be particularly well-suited for analyzing the current market status in Florida and the region.⁴⁷

⁴⁴ Unfortunately, we are unaware of any existing dataset that includes the scale of casino gambling at a county-level. Therefore we are unable to estimate the impact of casinos on employment and wages in a way that is sensitive to the volume of gambling. Although some studies have utilized casino revenue data at a state level, there is no good way of decomposing state-level aggregates into county-level data, especially since detailed revenue data are generally not available for Native American casinos, and Native American casinos make-up a significant proportion of Cotti's 161 casino counties. Therefore, we are unable to perform the analysis according to scale.

⁴⁵ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 27.

⁴⁶ Cotti's analysis relies on quarterly data from 1990-96, a period of significant expansion of casinos in the United States. The US landscape during that period is similar to the casino gambling landscape in Florida and the southeast region, as neither neighboring state has significant gambling opportunities for consumers. Therefore, the results based on Cotti's analysis may be particularly well-suited for analyzing the current market status in Florida and the region.

⁴⁷ In Spectrum's interview with Cotti, he agreed with this, and noted that, even if we utilized an updated database for casino existence, we would still be applying those results to Florida. (Phone interview with Chad Cotti,

- Since Cotti's data, model, and results went through a rigorous academic review process, readers can be confident that the foundation for our empirical analysis has been vetted by independent researchers. As the Cotti study appears to be state-of-the-art, there is no reason to "reinvent the wheel" for this part of the analysis.

Cotti's Analysis

Cotti utilizes ordinary least squares regression analysis (p. 25), which is a standard econometric methodology.⁴⁸ For his dependent variables, he uses the log of employment and log of earnings. By doing this, one can interpret his estimated coefficients as percentage changes in the dependent variable. So, for example, if the casino variable has a coefficient of 0.03 in the model on employment, it would indicate that the casino has a 3 percent positive effect on county employment during periods in which a casino is operating in the county.

Explanatory variables in the model include the demographic variables mentioned above, as well as dummy variables for county and quarter (i.e., county fixed-effects and quarter fixed-effects). These different variables help to control for differences in economic conditions across counties and through time. Controlling for these variables helps to ensure that the empirical results Cotti finds are the impacts on employment and earnings that are due specifically to the existence of a casino in the county, and not to any other factor. That is, the estimated coefficient provides the effect of casinos on employment and wages, holding everything else constant.

The two main variables that Cotti analyzes are employment and earnings. He tests the effect of casino existence on these variables at three different industrial levels across counties. He first tests total county employment (or employment in all industries). He subsequently tests the impact of casinos on two supersectors: Arts, Entertainment, and Recreation; and Accommodations and Food Services. In our analysis we estimate the impacts on "all industries," as Cotti does, and also on Leisure & Hospitality, which is the aggregate of the two supersectors that Cotti tests individually. In addition, we estimate the effects of casinos on "Other Services," based on the experiences in other peer counties. Since Cotti did not estimate a casino effect for "Other Services," we cannot use his study as a basis for the analysis of that sector.

August 24, 2013.) Any related problems that arise in our analysis would still exist, even if we were re-doing the entire Cotti analysis with more up-to-date data.

⁴⁸ It is unnecessary, and beyond the scope of this report, to go into detail on the econometric particulars of Cotti's study, since we are applying his results to Florida county data, rather than re-estimating his model. Nevertheless, here we provide a brief summary of Cotti's model description, found on p. 23-26.

Cotti's Results

The key results from Cotti's study are discussed below. It should be noted that there are a variety of different models estimated in the paper, and we present only the most relevant for our application to Florida.

1. Basic Results

In the first case, Cotti estimates the "casino existence" effect on overall county-level employment, i.e., that for all industries. His results indicate that the casino effect on employment is about +8.2 percent. That is, controlling for all other factors, casino counties will see 8.2 percent more jobs than non-casino counties, on average. However, county-level earnings for all industries (as a group) increase by less than 1 percent (0.79 percent) in casino counties, relative to non-casino counties. Based on these initial results, Cotti suggests that casinos "play a significant role in increasing both employment, earnings, and promoting economic development in a county" (p. 28).

Next Cotti isolates two different "supersectors" of industries: Entertainment (which includes arts, entertainment, and recreation, including casinos) and Hospitality (which includes food services and accommodations, including casino hotels).

When Cotti tests the casino impact on employment and earnings in the Entertainment sector, he finds that casinos have a large impact on overall employment, leading to 50.3 percent more jobs than in counties without a casino. However, Cotti notes that 30 percent of casino counties have fewer than 200 entertainment sector workers prior to the casino opening; this certainly helps to explain the large magnitude of the casino effect.⁴⁹ In addition, the earnings effect is also somewhat large: 19.1 percent, which Cotti attributes to the large increase in demand in the labor market that occurs when a new casino opens. These results indicate that the casino operations do have a significant impact on local labor markets.

The effect of casinos on the Hospitality sector are much milder, as Cotti finds no statistically significant impact on employment. (His estimate is that employment actually falls by about 1.6 percent, an effect that is not statistically significant from zero.) With respect to earnings, the casino impact on the Hospitality industries is found to be a statistically significant +3.5 percent.

The table below summarizes the findings. In the last row of the table, we calculated the weighted average of the casino impacts on the entertainment and hospitality sectors. The average number of employees per county in the entertainment sector was 903 for Cotti's sample. For the

⁴⁹ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 28.

hospitality sector, it was much larger, 4,256.⁵⁰ If we weight the sectors' employment and wage impacts from casinos according to the sizes of the sectors, we see that if we were to aggregate the sectors, we would expect an average of 7.5 percent increase in employment in casino counties relative to non-casino counties, and earnings in casino counties would be 6.2 percent higher in these sectors, compared to the earnings in non-casino counties.

Figure 3: Estimated county-level effect of casinos

Sector	Employment Effect	Earnings Effect
All Industries	+ 8.2%	+ 0.79%
Entertainment (NAICS 71)	+50.5%	+19.1%
Hospitality (NAICS 72)	- 1.55%	+ 3.47%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	+ 7.52%	+ 6.16%

Source: Cotti (2008, p. 27). Weighted average calculation by Walker, Spectrum Gaming Group.

If we consider a series of quarterly data on employment and earnings for counties in Florida, then we could apply the results from Cotti's analysis by adjusting the intercept (not the slope) of the trends by the values listed in the table. In particular, we have data on the Leisure and Hospitality supersector (entertainment and hospitality aggregated). So an initial prediction of the impact of casinos on selected Florida counties would be a jump in employment by 7.5 percent, while earnings would increase by 6.2 percent.

Of course, a key caveat to consider is that the results shown above are for the "average" county in the United States. We would not expect this pronounced casino impact in a very populous county such as Miami-Dade. But the results may be more likely to reflect what could happen in a county such as Washington (i.e., an average size county).

2. Time Trend

Next Cotti introduces county-level trends into his analysis. The inclusion of a trend variable, that simply counts from the beginning term of the sample period, to the end, controls for the fact that often variables move according to a long-established trend. If this is the case, then the positive employment and earnings impacts shown in the table above may be more due to trends than to the introduction of casinos. Indeed, Cotti's analysis confirms that this is the case, as the results in the table below indicate much smaller casino effects.

Figure 4: Estimated county-level effect of casinos, accounting for county trends

Sector	Employment Effect	Earnings Effect
All Industries	+ 3.12%	+ 0.35%
Entertainment (NAICS 71)	+22.4%	+ 7.24%
Hospitality (NAICS 72)	+ 1.71%	+ 2.26%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	+ 5.33%	+ 3.12%

Source: Cotti (2008, p. 31). Weighted average calculations by Walker, Spectrum Gaming Group.

⁵⁰ The total number of employees (on average across counties) in both sectors is 5,159. Thus, the entertainment sector comprises 17.5 percent of employment (903 divided by 5,159), while the hospitality industry represents 82.5 percent of the total (4,256 divided by 5,159).

Now the weighted average effects for the Entertainment and Hospitality supersector indicate that, accounting for trends in the data, casinos increase employment about 5.3 percent compared to non-casino counties, while they have a positive effect on earnings of about 3.1 percent, compared to non-casino counties. While this effect may seem relatively minor, even these increases could be seen as politically valuable given the slow recover from the 2007-09 recession.

3. Counties in Casino States Only

Next, Cotti re-estimates the effects considering only counties in states that have at least one casino. (That is, he eliminates from the model observations from counties in states where there are no casinos.) Cotti explains, “From the perspective of cultural or regional norms, the non-casino counties in casino states (states that have at least one casino in place) may provide a better control group.”⁵¹ Eliminating counties in non-casino states may also prevent these counties from over-influencing the empirical results.

The results of this model are shown in the table below. The weighted averages of the estimated effects for entertainment and hospitality industries are lower than in the previous specifications. One possible explanation for this is that states that legalized casinos in the early 1990s (the period covered by Cotti’s dataset did so, in part, because of dismal economic conditions and fiscal stress on the part of the state governments. This explanation of casino legalization is confirmed, among other potential explanations, in a recent study.⁵²

Figure 5: Estimated county-level effect of casinos, counties in casino states only

Sector	Employment Effect	Earnings Effect
All Industries	+ 2.72%	+ 0.66%
Entertainment (NAICS 71)	+25.1%	+ 7.44%
Hospitality (NAICS 72)	+ 0.57%	+ 1.53%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	<i>+ 4.86%</i>	<i>+ 2.56%</i>

Source: Cotti (2008, p. 31). Weighted average calculations by Walker, Spectrum Gaming Group.

4. Controlling for Lead and Lag Periods

For the next step in his analysis, Cotti recognizes that there is no reason to believe that, whatever effect casinos have on employment and wages, these effects will be constant over time. He therefore re-estimates the model and includes lead- and lag-periods instead of a time trend. That is, he isolates the casino impact on employment and wages for each year since the casino

⁵¹ Chad D. Cotti, “The Effect of Casinos on Local Labor Markets: A County Level Analysis,” *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 31.

⁵² Peter T. Calcagno, Douglas M. Walker, and John D. Jackson, “Determinants of the Probability and Timing of Commercial Casino Legalization in the United States,” *Public Choice*, Volume 142, 2010, p. 69-90.

was introduced in a county. He does this for years 1 through four, and for five and more years after casino introduction.⁵³

The results for the intertemporal model including all industries in the county suggests around 4 percent employment growth for the first two years after casino introduction, but no statistically significant employment growth, compared to non-casino counties, after that. Cotti finds no statistically significant earnings effect for all industries as a group. This is consistent with management practice. It is common for new casinos to open with higher staffing in year one, slightly reduced staffing in year two, and a stabilized workforce by year three. Casinos in Ohio, for example, employ significantly fewer staff in 2013 than they hired at opening in 2012, particularly since revenue projections were overly optimistic.

In the entertainment sector, however, the results indicate between 14 percent and 39 percent employment growth after the introduction of casinos, relative to non-casino counties. The results are all statistically significant, indicating a stable longer-run employment effect from casinos on the entertainment industry. As for earnings, in years 1 – 3 following casino introduction, there is an average of around 9.3 percent increase in earnings. But there are no statistically significant effects in the fourth year or beyond. This suggests no long-term impact of casinos on average wages in casino counties, relative to non-casino counties.

Finally, for the hospitality sector, Cotti finds that there is a 7.1 percent positive impact of casinos on employment, but only beyond 5 years after casino introduction. There is a very modest 3 percent positive earnings impact for the first 3 years after casinos open.

Overall, the intertemporal models suggest that, while there appears to be a significant positive impact of casinos on entertainment industry employment, the positive impacts from casinos otherwise seem to die out after several years.

5. County Size

Perhaps the most important secondary test by Cotti (for our purposes) is his estimation of the model based on county size (i.e., population). There is good reason to believe that a casino would have a more dramatic effect in a rural (or low population) county, compared to an urban (or more populated) county. As a given size casino would represent a more significant addition to a smaller economy than to a larger economy. Hence, we should expect its economic impacts to be smaller, the more populous the county. Other studies have confirmed that casinos tend to have larger impacts in more rural counties, relative to urban ones.⁵⁴ Cotti divides his sample into three groups, according to county population: Top third, middle third, bottom third. The results

⁵³ Chad D. Cotti, "The Effect of Casinos on Local Labor Markets: A County Level Analysis," *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 33.

⁵⁴ For example, see Chad D. Cotti and Douglas M. Walker, "The Impact of Casinos on Fatal Alcohol-Related Traffic Accidents in the United States," *Journal of Health Economics*, Volume 29, 2010, p. 788-796.

generally show that the positive employment and wage effects of casinos are larger in the smaller population counties.

In the tables below we reproduce Cotti's results after partitioning his sample into thirds, according to county population. As above, we also show the aggregated entertainment and hospitality sectors, weighted with the same weights as previously.⁵⁵

⁵⁵ The sectors would most likely have different weights since the sample is broken up. However, we have no way of knowing which of the jobs in each sector are attributable to counties in the different population categories.

Figure 6: Estimated top-third-population county effects of casinos

Sector	Employment Effect	Earnings Effect
All Industries	+ 0.28%	- 0.12%
Entertainment (NAICS 71)	+17.6%	+ 7.89%
Hospitality (NAICS 72)	+ 0.65%	+ 1.1%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	+ 3.61%	+ 2.28%

Source: Cotti (2008, p. 34). Weighted average calculations by Walker, Spectrum Gaming Group.

Figure 7: Estimated middle-third-population county effects of casinos

Sector	Employment Effect	Earnings Effect
All Industries	+ 2.4%	+ 0.1%
Entertainment (NAICS 71)	+22.5%	+ 7.7%
Hospitality (NAICS 72)	+ 2.88%	+ 2.1%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	+ 6.32%	+ 3.08%

Source: Cotti (2008, p. 34). Weighted average calculations by Walker, Spectrum Gaming Group.

Figure 8: Estimated bottom-third-population county effects of casinos

Sector	Employment Effect	Earnings Effect
All Industries	+10.5%	+ 1.84%
Entertainment (NAICS 71)	+28.7%	+ 6.74%
Hospitality (NAICS 72)	+ 3.1%	+ 4.59%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	+ 7.56%	+ 4.96%

Source: Cotti (2008, p. 34). Weighted average calculations by Walker, Spectrum Gaming Group.

Cotti argues that simply because there is a smaller percentage increase in employment in larger counties, that does not necessarily translate into a greater number of absolute jobs, relative to a large percentage increase in a smaller county. “A casino of a given size creates a certain number of jobs, regardless of the size of the community that hosts it.”⁵⁶ Of course, we might expect larger cities to host larger casinos. For example, there have been controversial proposals to build very large casinos in Miami. But large casinos are not always in large cities either, as is demonstrated by the Foxwoods and Mohegan Sun casinos in rural Connecticut.

6. Other Findings

Cotti also tests whether casinos appear to help or hinder other industry sub-types. He tests the impact of casino entry into a county on employment and earnings of other industries which might be expected to compete with casinos and casino hotels.⁵⁷ Generally, there are few results that are statistically significant, other than the positive employment effect on accommodations and “amusement, gambling & recreation.” There are no industries which see either a negative employment or earning effect that is statistically significant (Cotti, p. 36). This suggests that casinos tend to be mild complements, rather than substitutes, for other industries, overall.

⁵⁶ Cotti, interview with Walker 8/24/13.

⁵⁷ Chad D. Cotti, “The Effect of Casinos on Local Labor Markets: A County Level Analysis,” *Journal of Gambling Business and Economics*, Volume 2, 2008, p. 36.

Lastly, Cotti tests whether the employment and wage effects affect counties adjacent to the casino counties. However, he finds no statistically significant impacts on either employment or wages for all of the sectors he tests, with one exception. The neighboring county entertainment industries see a positive employment effect of 4.7 percent. But this is the only statistically significant neighboring-county effect.

The results of Cotti's tests of casino impacts on other industries (intra-county), as well as on industries in neighboring counties, provides a strong reason to doubt the "cannibalization" story or "substitution effect" that is raised by many casino critics. Based on Cotti's county-level study of employment and wages, casinos have almost no negative impact on other industries, and at least a mildly positive impact on some industries. In fact, this finding is consistent with other evidence from the literature. For example, Wiley and Walker found that casinos have a positive impact on retail property values in Detroit.⁵⁸

Summary of Cotti's Findings

As noted earlier, the study by Cotti is the most comprehensive study to date on the local-level economic impacts of casino existence. Cotti used a comprehensive dataset that included economic variables on all US counties (but excluded Nevada and New Jersey from the analysis) to estimate the impact of the existence of casinos on employment and wages at the county level.

The results show that casinos have a modest positive impact on county-level employment when all industries are considered. The impacts on wages were even smaller. The basic model indicated an 8.2 percent effect of casinos on employment, but only a 0.79 percent wage effect. However, once the county-level trends are controlled for, these casino impacts fall almost by half.

If we consider the Leisure and Hospitality supersector only, which includes casinos and casino hotels, and is perhaps the sector most likely to be impacted by the introduction of a new casino, the results indicate that, after controlling for trends, there is a positive employment effect of about 5.33 percent, while the earnings effect is 3.12 percent.

When the counties analyzed are limited to counties in casino states only, the casino impacts are shown to be milder, both overall, and for the Leisure and Hospitality supersector specifically.

When counties are separated by population, the results show the greatest casino impacts on lower-population (e.g., rural) counties, with much more modest impacts in more populous (e.g., urban) counties. Since most of the counties in Florida under consideration for casino expansion or the addition of machine games at existing pari-mutuels are relatively large

⁵⁸ Jonathan A. Wiley and Douglas M. Walker, "Casino Revenues and Retail Property Values: The Detroit Case," *Journal of Real Estate Finance and Economics*, Volume 42, 2011, p. 99-114.

population counties, we primarily rely on his estimates shown in Figure 6 above (employment effect of +3.61 percent; wage effect of +2.28 percent).

IV. Data and Counties for Analysis

The plan for the analysis of Florida requires that we use information from the experiences of other counties in the United States to inform our predictions of the likely casino effects in Florida. The best foundation for the analysis is to utilize the Cotti results, since they are derived from the most comprehensive study published to date, using the most current dataset on casinos of which we are aware. Since the results in that study were based on data from all US counties, and because the analysis included data on the introduction and existence of casinos at the county level, the estimated casino effects from the Cotti study can be applied to data on Florida counties to predict likely impacts. An additional advantage of using the Cotti estimates whenever possible is that they were produced through regression analysis, which controls for various demographic and economic variables that certainly impact the employment and wages at the county-level.

As discussed above, Cotti primarily analyzed employment and wages. In addition to these two variables, we analyze the number of establishments at the county level. This will help us to analyze the changes in local business structure, in particular, the total number of businesses operating in the county, as it relates to the opening and operation of a casino in the county.

The Cotti analysis focused on two aggregated industry sectors: “All Industries” and “Leisure and Hospitality.” We use Cotti’s estimates in forecasting Florida county values for those, for both prospective stand-alone casino counties and for pari-mutuel counties that could add slot machines (e.g., racinos). The variables to which we apply the Cotti estimates are employment and average weekly wages.

A note on terminology used in this report: We routinely refer to pari-mutuels which may add slot machines or other EGS as a result of a change in Florida gambling law as “racinos.” We do this for efficiency in wording even though we acknowledge that racetracks are not the only pari-mutuels in the state. Destination resort casinos or other stand-alone casinos are referred to simply as “casinos.”

In order to project the number of establishments, for both prospective casino counties and for racinos we utilize the trend data from a group of peer counties selected to simulate what the effects would be in Florida. In short, peer trend data will be utilized in cases where we do not have Cotti estimates available (i.e., for number of establishments in “All Industries” and “Leisure and Hospitality”; and for all variables in the “Other Service” sector.)

Data

Spectrum collected data on the “number employed,” “average weekly wages,” and “number of establishments,” for two supersectors, which are based on the North American Industrial Coding System (NAICS). The “supersectors” on which we collected data are “Leisure

and Hospitality” and “Other Services.” We also collected data on the aggregated sector, “All Industries.” The data run from the first quarter of 2002 (2002.1) through the fourth quarter of 2012 (2012.4). These data come from the Quarterly Census of Employment and Wages (QCEW) of the US Bureau of Labor Statistics.⁵⁹ This is the same data source used in Cotti’s study.

The analysis of the data for Leisure and Hospitality industries will give us a narrow picture of how casinos (and the related hotel, restaurant, and bar businesses in destination resort casinos) affect the industries that most directly compete with casinos. The analysis of “Other Services” will provide information on whether there appears to be a more general “substitution effect” caused by casinos, onto sectors not believed to be directly related to the casino industry. The analysis of “All Industries” will provide the most general picture of the economic impact of casinos on the local (county) economy.

Data Summary:	Level:	County
	Sectors:	All-Industries Leisure & Hospitality Other Services
	Variables:	Number of people employed Average weekly wages Number of [business] establishments
	Frequency:	Quarterly, 2002.1 through 2012.4

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Next, we provide basic information about the data.

1. Leisure and Hospitality

The Leisure and Hospitality supersector includes data from two sectors: Arts, Entertainment, and Recreation (NAICS 71), and Accommodation and Food Service (NAICS 72).

Arts, Entertainment, and Recreation is described by the NAICS:

...a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby and leisure-time interests.⁶⁰

⁵⁹ www.bls.gov/cew/

⁶⁰ <http://www.bls.gov/iag/tgs/iag71.htm> (Accessed August 21, 2013)

The subsectors included are: NAICS 711 (Performing arts, spectator sports, and related industries); 712 (Museums, historical sites, and similar institutions), and 713 (Amusement, gambling, and recreational industries).

Accommodation and Food Service is described by the NAICS:

...establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.⁶¹

The subsectors included in Accommodation and Food Service include: NAICS 721 (Accommodation) and 722 (Food Services and Drinking Places).

Since gambling is included in the Arts, Entertainment, and Recreation sector, the analysis of county-level data for this classification allows us to estimate the extent to which there is a “substitution effect” or “cannibalization” among different industries that might be expected to compete with the casino or other gambling industries. That is, a positive trend in employment and/or wages in the Arts, Entertainment, and Recreation sector would suggest that casinos create a net positive impact on employment. Whereas a negative impact from the introduction of casinos would imply that the jobs created at casinos are more than offset by job losses in other entertainment/recreation industries.

Another concern with the introduction of casinos is based on the fact that destination resort casinos typically have large hotels and a variety of bars and restaurants in close proximity of the casino floor. This may cause casino patrons to visit the different businesses within the casino resort, causing a loss in business to competing restaurants, bars, and hotels. To the extent that the hotels, bars, and restaurants associated with casinos “cannibalize” similar nearby businesses, we might expect the net effect of casinos to be negative on employment and wages. However, if casinos are complementary to other related businesses, say by some tourists leaving the casino property to see the surrounding city, then the casino’s tourism draw may cause a net increase in employment and wages.

It should be noted that Cotti analyzed the Entertainment and Hospitality sectors separately. However, we aggregate the two into the “supersector,” the combined data for which is provided by the QCEW. One argument for aggregating the sectors is that casino hotels are included in the Hospitality sector, while the casino operations are included in the Entertainment sector. Rather than splitting the two sectors, we believe it more appropriate to keep the industries combined, as they are in operation. Still, our analysis provides information on how overall employment in the entertainment and hospitality sectors (combined) will change, including the employment at the casino resorts themselves.

⁶¹ <http://www.bls.gov/iag/tgs/iag72.htm> (Accessed August 21, 2013)

In summary, the analysis of the impact of casinos opening on employment, wages, and number of establishments in the Arts, Entertainment, and Recreation and in Accommodation and Food Service (i.e., the Leisure and Hospitality supersector) will give us a general understanding of the impact of casinos on the local economy.

2. Other Services

We also examine the “Other Services” classification for Florida counties, which is a part of the service-providing industries supersector group. Other Services (which excludes public administration) includes firms that are not included in other service sector classifications. The NAICS describes Other Services:

Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.⁶²

One rationale for choosing this sector, rather than a more “focused” one (such as Construction) is that it enables us to examine whether there would be an impact on a wide variety of firm types, as a group. Therefore, it allows us to measure a more general casino effect on firms that might not be expected to have either a direct substitute or complementary relationship to casinos, but that are still service sector firms. *A priori* we would not expect any relationship between “Other Services” and the casino/racino industry.

3. All Industries

Our last group is the most inclusive possible, “All Industries” in the county. Using the county-level data on all employment, wages, and number of firms, will give us the most general picture of the impacts casinos have on the local economy. If there is a significant “cannibalization” or “substitution” effect from the opening of a casino, then we should see either a neutral or negative impact on employment and wages, as the casinos cause other jobs in the county to disappear to an extent that more-than-offsets the jobs created at the casino. Cotti also analyzed All Industries as his most aggregated sector.

Counties for Analysis

Our analysis for this study is focused on county-level economic variables and their likely response to the introduction of a stand-alone casino resort, as well as the response in other counties to the addition of slot machines to existing pari-mutuel gambling facilities, such as race tracks (i.e., racinos). We select several counties for analysis, based on (1) the counties that are perhaps most likely to be considered as hosts for new commercial destination resort casinos, and

⁶² <http://www.bls.gov/iag/tgs/iag81.htm> (Accessed August 21, 2013)

(2) counties in which there are currently-operating pari-mutuel gaming facilities. We discuss the Florida counties in turn, as well as the peer counties to be used as a part of the analysis.

1. Casino Counties

We must obviously speculate as to which counties are most likely to be hosts for new casinos if they were legalized in the state. However, the predicted impacts on the relatively aggregated industry classifications are not likely to be extremely sensitive to which particular counties host new casinos.

The following table illustrates casinos currently operating in Florida. We also list machine and table game data from casinocity.com, as well as the county and opening date of each casino.

Figure 9: Florida counties with Native American casinos

Casino Name	County	Opening Date	Gaming Machines	Table & Poker Games
Big Cypress Casino	Hendry	April 2012	36	--
Seminole Casino Coconut Creek	Broward	2000	2,400	95
Seminole Casino Hollywood	Broward	Dec. 1979	1,150	32
Seminole Hard Rock Hotel & Casino Hollywood	Broward	May 2004	2,500	135
Seminole Casino Immokalee	Collier	1994	1,200	44
Miccosukee Resort & Gaming Center	Miami-Dade	1999	2,000	32
Seminole Casino Brighton	Okeechobee	1980	380	7
Seminole Hard Rock Hotel & Casino Tampa	Hillsborough	Mar. 2004	5,008	185

Source: www.casinocity.com (accessed August 22, 2013), Spectrum Gaming Group.

Since Cotti's analysis examines the impact of a casino operating in a county, we might be inclined to estimate changes in wages and employment only for counties that currently do not have operating casinos of any type. Then we would be applying Cotti's estimates in a way most consistent with his analysis.

At the same time, however, we could argue that we should consider counties in which there is an existing Native American casino, since a new casino is likely to create a novelty effect that is as big (or even bigger) as when the existing casino opened in the county. One could argue that this would be the more reasonable assumption, since Florida already has a well-developed, widespread gambling industry. There is still likely to be a large novelty effect from new casinos.

We must also consider that a new casino being built in a county with an existing Native American casino may cannibalize the competition, at least to an extent. This may suggest that the impact of a new casino should perhaps be less than the impacts estimated by Cotti. Alternatively, a new casino in an area may create a positive clustering effect. That is, it is possible that two casinos located near each other may collectively draw more customers than the sum of the individual casinos had they been located further apart. This is certainly the case in markets like Las Vegas, Biloxi/Gulfport, and Atlantic City. Although the casinos must compete with each

other, there is also a positive agglomeration effect, as tourists are likely to be attracted to an area simply because it has more entertainment (i.e., casino) options to choose from.

There is probably some merit to all of the above scenarios; which of the effects is strongest is difficult to determine. Therefore, we simply use Cotti's estimates as they are, assuming that the impacts of existing casinos have died-out. This assumption is somewhat consistent with Cotti's findings regarding the economic impacts of casinos analyzed based on lag periods since the casinos' introduction. But the possible scenarios described here should be kept in mind when interpreting the empirical results below. We effectively assume that these various effects roughly offset each other.

Based on Spectrum's familiarity with Florida, the current and recent political climate in Florida, and the discussion above, we choose the following counties for our primary analysis: Broward, Hillsborough, Miami-Dade, Orange.

Broward, Miami-Dade, and Hillsborough counties all have existing Native American casinos and so the addition of a commercial casino in these counties may be less controversial than in other counties in Florida.⁶³ Orange County is home to Walt Disney World, and could be considered as a host county for a casino resort, even though there would certainly be opposition to that.

Cotti's study found little or no impact on employment and wages in counties adjacent to casino counties. For this reason, we limit our analysis to above-listed counties in Florida and do not attempt to model neighboring county impacts.

2. Pari-Mutuel Counties

In Part 1B of this study (discussion of Scenario G), the different counties that currently host pari-mutuels were listed in a table, reproduced below. The table also shows the county's population ranking, by third, relative to 3,100+ counties in the United States. As shown, all Florida pari-mutuel counties except Hamilton, Jefferson, and Washington, are in the top third of most populous counties. This is important to note because it will determine which of the Cotti estimates are used to forecast the economic impact of introducing machine games at pari-mutuels. It will also influence our choice of peer counties to use.

⁶³ These counties also have pari-mutuels, such as greyhound or horse racetracks, many of which include other forms of gambling, such as EGMs.

Figure 10: Florida’s non-gaming pari-mutuel licenses

Property	City	County	Population Ranking (by thirds)
Melbourne Greyhound Park, LLC	Melbourne	Brevard	Top
Orange Park Kennel Club, Inc.	Jacksonville	Clay	Top
Jacksonville Greyhound Racing, Inc.	Jacksonville	Duval	Top
Pensacola Greyhound Racing, LLP	Pensacola	Escambia	Top
Gretna Racing, LLC	Gretna	Gadsden	Top
Hamilton Jai Alai and Poker	Jasper	Hamilton	Bottom
Jefferson County Kennel Club, Inc.	Monticello	Jefferson	Bottom
Naples Fort Myers Greyhound Track	Bonita Springs	Lee	Top
Ocala Poker & Jai-Alai	Orange Lake	Marion	Top
Palm Beach Kennel Club Poker Room	West Palm Beach	Palm Beach	Top
Derby Lane	Saint Petersburg	Pinellas	Top
Sarasota Kennel Club, Inc.	Sarasota	Sarasota	Top
Orlando Jai-Alai & Race Book	Casselberry	Seminole	Top
Sanford-Orlando Kennel Club	Longwood	Seminole	Top
St. Johns Greyhound Park (Bayard Raceways, Inc.)	Jacksonville	St. Johns	Top
Fort Pierce Jai-Alai	Fort Pierce	St. Lucie	Top
Daytona Beach Kennel Club, Inc.	Daytona Beach	Volusia	Top
Ebro Greyhound Park	Ebro	Washington	Middle

Source: Florida Department of Business and Professional Regulation, Division of Pari-Mutuel Wagering. County population estimates from US Census, <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk> (accessed August 26, 2013)

Omitted from the table are counties that are considered to be prospective casino counties, as discussed above. Those counties will be treated as casino counties, not as pari-mutuel counties in this analysis. However, it should be recognized that there could be a larger economic impact if both a casino is opened and slot machines are added to existing pari-mutuels in the county. Both could certainly spur economic development equally. At the same time, we should acknowledge that pari-mutuel casinos and stand-alone casino likely substitute for each other, from the consumer’s perspective. One can easily increase the projected effect in casino and pari-mutuel counties to account for the effect of both, but we focus our analysis on the casinos in the “casino counties” discussed above.

Since all of the counties (except three) are ranked in the top third most populous counties in the United States, the estimated economic impact of introducing slot machines will be the same for those counties, in terms of the magnitude of change. The estimated impacts will be larger, in percentage terms, for those counties that have smaller populations, as found in Cotti’s study.

3. Peer Counties

If we had complete data on all US counties, we could follow a systematic methodology for choosing peer counties for our analysis of potential casino and pari-mutuel counties in Florida. However, since we do not have such data that also includes up-to-date casino existence data, we must choose peer counties “manually.” The most important criteria to consider, of course, is that the county must have had a casino open within the past decade. This way we will

be able to compare data before and after casino opening, in order to project impacts onto Florida's prospective casino counties.

Other variables that we could consider include population (or population density), per capita income, and unemployment. It is somewhat difficult to find exact matches to serve as peer counties, so we opt to choose a small group of counties whose averages will serve as the peer for the Florida casino and pari-mutuel counties. Peer counties were chosen based primarily upon the variable of population size, followed by the introduction of casino gaming either within or directly adjacent to the county in question and completely within the time window of our data set of 44 quarterly periods (2002-2012). In the case of San Diego County, a robust tourism component of the economy argued for inclusion, despite the fact that small scale Native American gaming had begun prior to our ten year time horizon.

Having a small group of peer counties, and using their average casino effects, reduces the chance that our analysis relies on an outlier. We view the existence of a casino, and a similar population to be the two key criteria for choosing peer counties. We view the similarity of population to be critical, as population has been shown to be a key determinant of the relative impacts of casino introduction. In addition, 19 of the 22 included as casino or pari-mutuel counties in the state have "large" populations by Cotti's categorization.

The peer counties chosen are shown below along with their population and casinos.

Figure 11: Peer counties for analysis

County	State	Population	Casino Opening Date
Allegheny County	Pennsylvania	1,229,338	2007
Philadelphia	Pennsylvania	1,547,607	2004
San Diego	California	3,177,063	2002
Westchester	New York	961,670	2006

Source: Spectrum Gaming Group

All of the peer counties are in the top 3 percent populous counties in the United States. This size is consistent with all of the casino counties and most of the pari-mutuel counties in Florida. Obviously each county has unique economic and demographic characteristics, but our primary goal was choosing large counties that had legalized casinos at some point in the time period.⁶⁴

Numerous pari-mutuel racetracks have introduced slot machines over the past decade. Some of those have gone on to introduce table games (either live or electronic), and in many cases these "racinos" are very similar in size and scope to stand-alone casino resorts. Because most of the pari-mutuels that could be allowed to introduce slot machines in Florida are in relatively highly populated counties, we treat the projection of economic impacts as the same as

⁶⁴ There are more refined methodologies for choosing ideal peer counties, however, such methods require an enormous amount of data on all counties. We do not have such a database. Nevertheless, we believe the averaging of the peer county effects will provide a very good foundation for projecting future impacts.

for the casino counties. For pari-mutuels then, we can use the same peer counties as we chose for the casino counties, above. In order to address the middle- and bottom-population counties in the sample, we adjust the projected estimates based on the difference in effects estimated by Cotti. (This is explained in more detail below.)

The peer counties for these casino counties will provide the estimated casino effect for the number of establishments (for “All Industries” and “Leisure and Hospitality” sectors), as well as the estimated employment, average weekly wage, and number of establishments in the “Other Services” sector. That is, the peer counties provide the estimated impacts on any variables/industry sectors that Cotti did not estimate in his study. Details on the analysis are discussed in a section below.

A caveat that should be noted is that the projections based on Cotti’s estimated results should be given greater confidence than estimates based on the experience in peer counties. This is because Cotti’s estimates are based on a regression analysis that controls for demographic and various economic variables. The projections based on peer counties come from the trends before and after the introduction of casinos. While these trends are based on the overall experience within the county, the estimated casino impact does not control for other demographic and economic factors. Nevertheless, these are the best estimates on which to project the potential casino effect, given we do not have complete demographic and economic data on US counties from which to base the projections.

V. Overview of Analysis

Above we summarized the data we are using and the counties that we are analyzing for this part of the report. Next we describe the analysis, which focuses on the likely impacts of casino introduction/expansion in Florida counties is based on past trends in our variables (number employed, average weekly wages, and number of establishments), the estimated casino impacts from Cotti's analysis, and the effect of casino introduction in non-Florida peer counties.

The analysis is organized into two parts. We first discuss the projected effects of introducing casinos in the four counties discussed above: Broward, Hillsborough, Miami-Dade, and Orange. Then we discuss the projections for the pari-mutuel counties. For our projections we assume that all of the counties would introduce slot machines at their existing pari-mutuels. The economic impacts of creating a "racino" at an existing race track are assumed to be the same as the introduction of a stand-alone casino.⁶⁵

We analyze changes in three industry groups: "All Industries," "Leisure & Hospitality," and "Other Services". For each industry, we provide projections on employment, average weekly wages, and number of establishments. The projections for employment and wages come from Cotti's study, for "all industries" and "leisure & hospitality," and from peer county estimates for the remaining variables.

Estimated Casino Effects from Cotti's Estimates

The key results from Cotti's study that are relevant for our projections are those related to "top third" populous county. Below we reproduce Table X from above, which shows Cotti's estimated casino impacts on employment and wages for highly populated counties.

Figure 12: Estimated top-third-population county effects of casinos

Sector	Employment Effect	Earnings Effect
All Industries	+ 0.28%	- 0.12%
Entertainment (NAICS 71)	+17.6%	+ 7.89%
Hospitality (NAICS 72)	+ 0.65%	+ 1.1%
<i>Weighted Average of Entertainment and Hospitality Sectors</i>	+ 3.61%	+ 2.28%

Source: Cotti (2008, p. 34). Weighted average calculations by Walker, Spectrum Gaming Group.

In projecting the impacts at the most aggregate level ("All Industries"), we note that casinos have a statistically insignificant impact on both employment and wages. That is, statistically, they have no impact on these variables. However, if we look at the entertainment and hospitality sectors, which we combine in our analysis, the result of which is the Leisure and

⁶⁵ This assumption is reasonable, given that Cotti's estimated impacts are based on the experiences of casinos large and small throughout the United States, and as a result, represent impacts from the average casino in the country.

Hospitality supersector, we find statistically significant impacts on both employment and earnings.

In order to project the casino effect into the future, we calculate the growth rate in each variable over the 2002 – 2012 period. This is the trend that we project the variable will follow into the future.⁶⁶ Recall that Cotti’s estimated casino effects relate to the “existence” of a casino in the county. That is, his estimated effects are for counties with a casino, relative to those without. In projecting future values of employment and wages, then, we adjust upward the variable’s trend by Cotti’s estimated impact.

Since the key change of interest is the one-time impact of introducing a casino in the county (i.e., this is the effect provided in Cotti’s estimates), the length of time over which we project future values is of relatively little concern. For all models, we assume casinos are introduced in the first quarter of 2013, and we project values out through the end of 2014, giving two full years of quarterly projections. The 2013 opening date is chosen so that the estimated casino effect is added to *actual data* (which ends in 2012Q4) and not to a projected value.

It is worth noting that the projection time of 2 years is arbitrary, but it is also inconsequential. What is relevant is the estimated “jump” in the data series as a result of the casino opening. The actual date a casino opens would not markedly change the projected values. The no-casino and casino projections would continue to move into the future in the same pattern. In the results section, we provide an overview of the estimated number of jobs and change in wage rate attributable to casinos, as of the 2014, quarter 4 projection.

It will be noted in the graphical presentations that there is a strong seasonal component to these series. This probably is related, to an extent, on the seasonality of tourism in Florida. In order to account for the seasonal difference in the data, we use same-quarter projections. That is, the values for the second quarter of 2013 are projected based on second quarter values from the past, along with the overall estimated trend. Thus, the projections reflect the actual seasonality of the past data.

Estimated Casino Effects from Peer County Estimates

We utilize data from the peer counties discussed above to project variables for which Cotti did not estimate. We use peer counties to project future values for “number of establishments” in “All industries,” “Leisure & hospitality,” and “Other services.” We also use peer counties for the projection of employment and wage changes in “Other services.”

The projected casino and “racino” impacts using peer county data are calculated differently from the Cotti estimates. This is because we are not performing a regression analysis

⁶⁶ We analyzed what would happen when different trends are calculated, for example, omitting the effects of the 2007-09 recession. What we found was that the recession effect (negative) was offset by the higher than normal growth rate after the recession (positive). Including all periods seems to be the most reasonable and a conservative way to estimate the trend.

on the data, and so we opt for the simplest way to estimate the casino/racino impact, given we have limited data. We estimate the casino impact from casinos using peer county data before and after the introduction of casinos. Specifically, we take the difference in values from one year before to one year after the opening of the casino. The difference is the estimated casino effect. We divide the difference by the pre-casino value to derive the estimated percentage change in the variable due to the casino or racino. The calculations for the base peer effects are shown in the figure below. Given that we have 2012Q4 data, we can provide an estimate of what each variable would have been in that quarter had the racino being operating in that period.

Figure 13: Estimated casino effects based on peer counties

	All Industries	Leisure & Hospitality	Other Services
Number of Establishments			
1 Yr Before Opening	43,556	3,881	7,225
1 Yr After Opening	45,580	4,104	7,859
Change	2,024	223	634
% Change	4.65%	5.7%	8.78%
Number Employed			
1 Yr Before Opening	626,440	69,865	28,647
1 Yr After Opening	643,288	74,502	29,806
Change	16,848	4,637	1,159
% Change	2.69%	6.64%	4.05%
Cotti Estimated Effects	0.28%	3.61%	n/a
Average Weekly Wages			
1 Yr Before Opening	\$924	\$408	\$514
1 Yr After Opening	\$989	\$446	\$566
Change	\$ 65	\$ 38	\$ 52
% Change	7.0%	9.3%	10.1%
Cotti Estimated Effects	-0.12%	2.28%	n/a

Source: Spectrum Gaming Group

There are several points to emphasize about the above calculations. First, as noted above, we are less confident in predictions based on this method. However, given the available data, this methodology may be the best available by which to estimate the casino impact. Nevertheless, it should be understood that it does not account for various economic and demographic factors that could explain trends in the data. Also, this method implicitly assumes that the addition of the casino is the primary driver of any increase in employment, wages, etc., above the pre-casino level.

One check of the estimated effects based on the peer counties is to compare these to analogous estimates from Cotti. In the preceding figure we have inserted Cotti's estimated effects from "large counties" for comparison with the estimated peer effects. The estimated peer

effects are all significantly larger than Cotti's estimates. We posit a rough calibration of the peer county estimated effects to make them more consistent with Cotti's estimated effects.⁶⁷ Unfortunately, there is no purely scientific way to determine the appropriate adjustment for the estimated impacts. However, based on the figures in the table above on employment and wage effects, a reasonable adjustment would seem to be cutting the estimated peer effects in half. They would still be higher than most of the Cotti effects, but at least this would bring the two sets of estimates more in line than they are originally.⁶⁸ Since the peer county estimated impacts for average weekly wages are so far above the Cotti estimates, we divide this value by three. Although we have some information from Cotti's study to adjust the peer county estimates for wages and employment, Cotti provided no information on number of establishments, so our estimate here is likely to be least reliable.

Estimated Casino Effects

The "calibrated" peer county casino estimates are shown in the figure below, along with the Cotti estimates, where available. These are the estimated casino/racino impacts that we use in our analysis in forecasting the future impacts if Florida changes its gambling laws to allow stand-alone casinos and slot machines at racetracks.

It should be emphasized that these effects are "level" effects, which would be applied to a trend at a single point of time (e.g., casino opening). The estimates do not affect the variables' trend slopes (i.e., the rate at which they increase after the initial change in level).

Figure 14: Estimated casino effects, calibrated with Cotti's estimates

Sector	No. of Establishments	No. Employed	Avg. Weekly Wages
All Industries	+ 2.32%	+ 0.28%	- 0.12%
Leisure & Hospitality	+ 2.85%	+ 3.61%	+ 2.28%
Other Services	+ 4.39%	+ 2.03%	+ 3.36%

Source: Spectrum Gaming Group, Cotti (2008). Note: Shaded cells represent Cotti estimates.

Unemployment Rates

At the county level overall, as shown by Cotti's nationwide estimates on employment in all industries (shown above), there are no statistically significant impacts on overall employment. This suggests that the introduction of casinos will have little or no impact on the unemployment

⁶⁷ It should be noted that Cotti's original estimated effects, prior to adjustment for trends and division of counties by population group, were much larger. For example, his initial casino employment effect on All Industries was 8.2 percent. This variation in estimates confirms that the estimated effects are very sensitive to the method of estimation. This should be kept in mind when interpreting the results in this report.

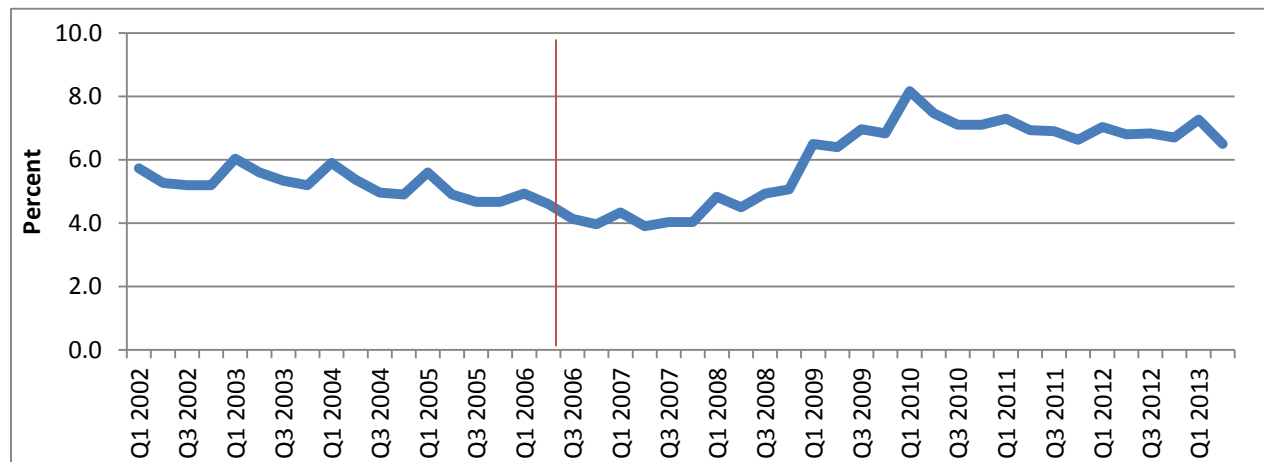
⁶⁸ Obviously, this is a somewhat arbitrary adjustment. But it is being made in an effort to be conservative and not over-state the likely impacts of casinos. One of the key reasons to believe that the estimated effects based on peer counties are overstating the actual casino effects is that we do not account for inflation, whereas the Cotti estimates do. Our goal is to provide a reasonable calibration of estimates because we are forced to use estimated impacts from different sources.

rate for individual counties. However, it should be noted that casinos may employ individuals from outside the county. So there is not necessarily a straightforward relationship between the employment effect within a county and the unemployment rate. However, it is fairly clear from the empirical evidence that since the casino introduction has a minimal net effect on employment, and no measurable impact on employment in neighboring counties⁶⁹, then it is unlikely that casinos would markedly affect the unemployment rate, especially in large population counties.

When we examine the unemployment rate for the peer counties utilized in the analysis, we find no indication that the casino opening changes the existing trend in unemployment. In the figures below we present the quarterly county-level unemployment rate. We also note the date of the first casino opening in the county.⁷⁰

Nationally, unemployment was on the decline in the 2000s, and was below 5 percent through 2007. Of course, the recession began in December 2007, lasting through mid-2009, which explains the sharp increase in unemployment in the peer county graphs. If the casino opening had a strong impact on the unemployment rate in the county, we should see a clear change in the slope of the unemployment line immediately following the casino opening. None of the graphs shows such an effect.

Figure 15: Quarterly unemployment rate in Allegheny County, PA (casino opening: 2006 Q2)

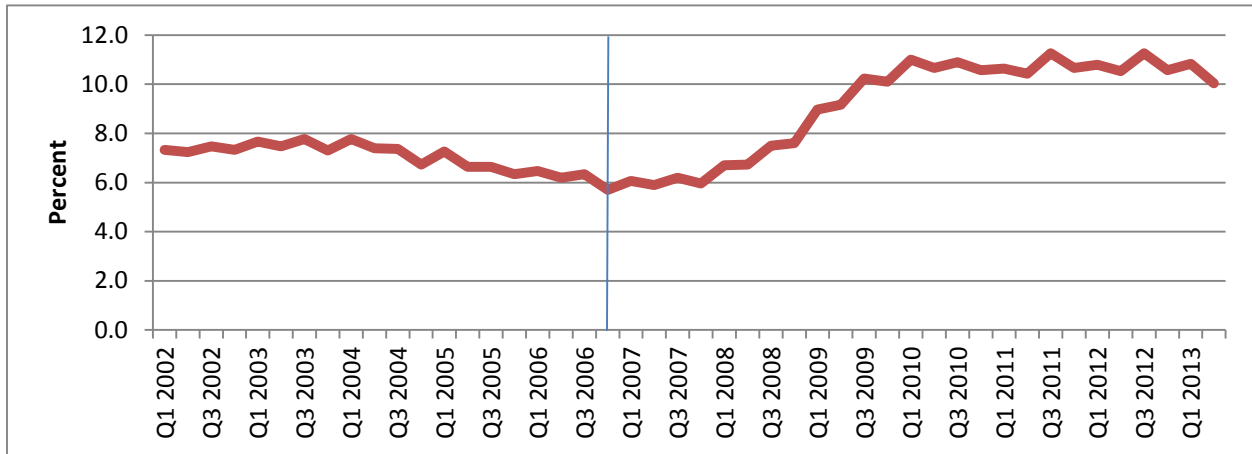


Source: Bureau of Labor Statistics (<http://data.bls.gov/cgi-bin/dsrv?la>)

⁶⁹ Cotti (2008).

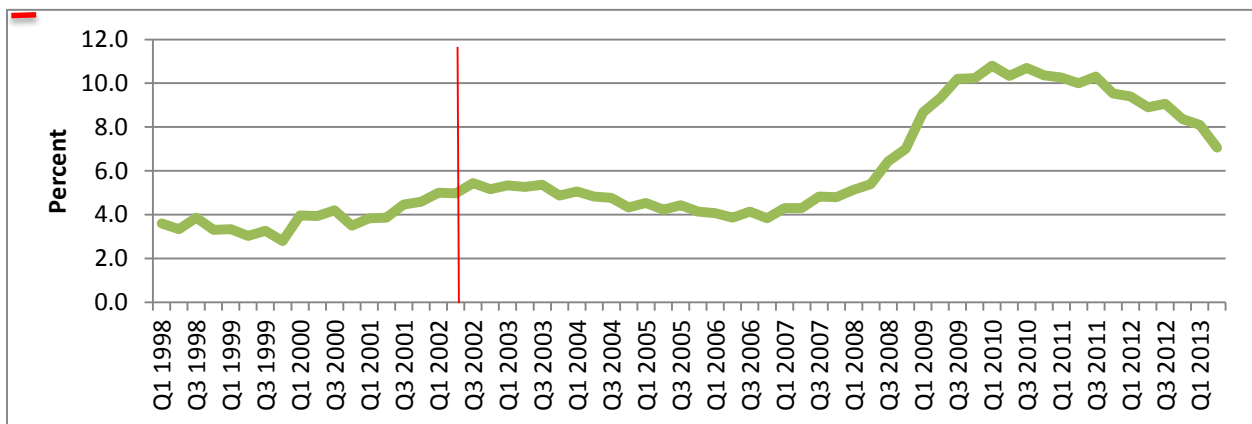
⁷⁰ The exception is for San Diego County, which had some small casinos operating prior to the date indicated.

Figure 16: Quarterly unemployment rate in Philadelphia County, PA (casino opening: 2006 Q4)



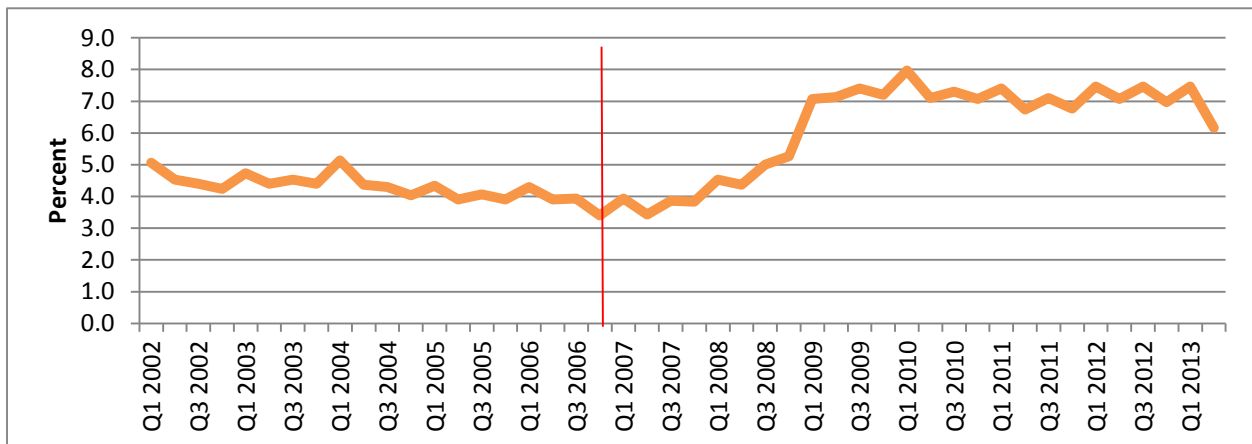
Source: Bureau of Labor Statistics (<http://data.bls.gov/cgi-bin/dsrv?la>)

Figure 17: Quarterly unemployment rate in San Diego County, CA (casino opening 2002 Q2)



Source: Bureau of Labor Statistics (<http://data.bls.gov/cgi-bin/dsrv?la>)

Figure 18: Quarterly unemployment rate in Westchester County, NY (casino opening 2006 Q4)



Source: Bureau of Labor Statistics (<http://data.bls.gov/cgi-bin/dsrv?la>)

The peer counties on which we have data do not show a casino effect on the unemployment rate. In addition, the county-level unemployment rate cannot be forecast without some way of controlling for migration across county lines, as well as changes in the labor force. These complications also make employment a more valuable indicator of the “big employment picture” than the unemployment rate.

VI. Results

The results of the analysis are presented in the subsections below. The estimated impacts from the introduction of casinos or the addition of slot machines (or EGMs) at existing pari-mutuels in the state are treated as similar, with respect to the magnitude of gambling expansion. That is, pari-mutuels are assumed to add enough machine games that the resulting “racino” is similar in size to a stand-alone casino resort. This assumption is not likely to markedly affect the results, however. Recall that Cotti’s estimated casino impact on county-level data represent the most comprehensive estimated casino effects published in the literature. Nevertheless, they do have limitations. For example, the estimated effects are based on a regression analysis that includes counties of various sizes from across the United States, which host casinos of various sizes and in various numbers. The resulting estimates are thus for the “average” casino county. The data and methodology do not allow for very precise predictions of the variables. Nevertheless, we believe the estimates provided are reasonable, given the data.

Pari-Mutuel Counties

We begin by presenting the estimated impacts of introducing slot machines (or EGMs) at existing pari-mutuels in the state. As noted above we utilize the peer counties discussed above in order to estimate the impacts on variables for which we do not have estimates from the Cotti study. Since we are not analyzing specific the economic conditions for each of the pari-mutuel counties separately, for the sake of brevity, we present the estimated results in a table that lists the actual values for each variable, as of 2012Q4. We then show what the value would be in 2013Q1, assuming the racino was open in that period (i.e., slot machines were added to the existing pari-mutuel in the county). All of the estimates are based on the casino impacts shown in the figure above.

1. All Industries

Cotti estimated statistically insignificant changes to the amount of employment and average weekly wages when “All Industries” in the county are considered. Therefore, we do not show results for employment and average weekly wages for “All Industries.” The addition of slots at pari-mutuels is not expected to impact these variables.

There are three exceptions to these results. Referring back to Figures 7 and 8, we see that middle- and small-population counties are estimated to see larger casino/racino impacts. Hamilton and Jefferson Counties are considered “small” counties (indicated by ** in the table below), so the estimated employment impact from a racino in those counties is 10.5 percent for “All Industries,” and for wages it is 1.84 percent. Washington County is a middle-sized county (indicated by * in the table below), and the estimated employment effect of adding a racino there is 2.4 percent; the wage effect is essentially zero, however (0.1 percent). The reported effects in

the subsequent tables (for the Leisure and Hospitality and Other Services sectors) probably modestly understate the true impact of adding slots in those counties.

In the figure below we show the estimated effect of adding machines at pari-mutuels on the number of establishments in each county. As noted above, the relatively smaller counties would likely see impacts that are larger than those listed in the table, but we have no way of precisely estimating the additional number.

Figure 19: Pari-mutuel counties, all industries: number of establishments with racino added

County	Property	2012 No. Establ.	2012 Est. w/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	14,544	14,881	337
Clay	Orange Park Kennel Club, Inc.	4,140	4,236	96
Duval	Jacksonville Greyhound Racing, Inc.	27,488	28,126	638
Escambia	Pensacola Greyhound Racing, LLP	8,018	8,204	186
Gadsden	Gretna Racing, LLC	819	838	19
Hamilton**	Hamilton Jai Alai and Poker	227	232	5
Jefferson**	Jefferson County Kennel Club, Inc.	316	323	7
Lee	Naples Fort Myers Greyhound Track	19,092	19,535	443
Marion	Ocala Poker & Jai-Alai	7,983	8,168	185
Palm Beach	Palm Beach Kennel Club Poker Room	50,618	51,792	1,174
Pinellas	Derby Lane	31,070	31,791	721
Sarasota	Sarasota Kennel Club, Inc.	14,665	15,005	340
Seminole	Sanford-Orlando Kennel Club; Orlando Jai-Alai & Race Book	14,012	14,337	325
Seminole	Sanford-Orlando Kennel Club		-	-
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	6,135	6,277	142
St. Lucie	Fort Pierce Jai-Alai	5,721	5,854	133
Volusia	Daytona Beach Kennel Club, Inc.	13,406	13,717	311
Washington*	Ebro Greyhound Park	442	452	10

Source: Spectrum Gaming Group; Bureau of Labor Statistics. Note: County size classifications based on Cotti's: ** = Small-sized county; * = middle-sized county.

The tables illustrates the estimated increase in the number of businesses that would be operating in the county had each pari-mutuel also had slot machines operating at the business. The estimated effect is +2.32 percent.

2. Leisure & Hospitality

Next we illustrate the estimated effect of adding slots to pari-mutuels on the more narrowly-defined leisure and hospitality supersector. It should be noted that the average weekly wages are somewhat lower in this sector because some workers receive tips as a significant amount of their wages, and tips are not included in reported wages.

The three tables that follow show the estimated impact in each county on number of establishments (+2.85 percent), employment (+3.61 percent), and average weekly wages (2.28 percent) in the leisure and hospitality sector.

As shown in the figures, the addition of slots to existing pari-mutuels is expected to provide a modest economic stimulus in the leisure and hospitality sector. The estimated results suggest that slot machines being added to pari-mutuels is more likely to act as a complement, rather than a substitute, to the leisure and hospitality businesses.

Figure 20: Pari-mutuel counties, leisure & hospitality: number of establishments with racino added

County	Property	2012 no. Est.	2012 Est. w/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	1,368	1,407	39
Clay	Orange Park Kennel Club, Inc.	369	380	11
Duval	Jacksonville Greyhound Racing, Inc.	2,531	2,603	72
Escambia	Pensacola Greyhound Racing, LLP	799	822	23
Gadsden	Gretna Racing, LLC	74	76	2
Hamilton	Hamilton Jai Alai and Poker	17	17	0
Jefferson	Jefferson County Kennel Club, Inc.	26	27	1
Lee	Naples Fort Myers Greyhound Track	1,778	1,829	51
Marion	Ocala Poker & Jai-Alai	667	686	19
Palm Beach	Palm Beach Kennel Club Poker Room	3,944	4,056	112
Pinellas	Derby Lane	3,061	3,148	87
Sarasota	Sarasota Kennel Club, Inc.	1,209	1,243	34
Seminole	Sanford-Orlando Kennel Club; Orlando Jai-Alai	1,040	1,070	30
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	653	672	19
St. Lucie	Fort Pierce Jai-Alai	507	521	14
Volusia	Daytona Beach Kennel Club, Inc.	1,394	1,434	40
Washington	Ebro Greyhound Park	44	45	1

Source: Spectrum Gaming Group; Bureau of Labor Statistics

Figure 21: Pari-mutuel counties, leisure & hospitality: number employment with racino added

County	Property	2012 Employment	2012 Est. w/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	22595	23,411	816
Clay	Orange Park Kennel Club, Inc.	6,800	7,045	245
Duval	Jacksonville Greyhound Racing, Inc.	45,891	47,548	1,657
Escambia	Pensacola Greyhound Racing, LLP	14,392	14,912	520
Gadsden	Gretna Racing, LLC	683	708	25
Hamilton**	Hamilton Jai Alai and Poker	131	136	5
Jefferson**	Jefferson County Kennel Club, Inc.	200	207	7
Lee	Naples Fort Myers Greyhound Track	34,120	35,352	1,232
Marion	Ocala Poker & Jai-Alai	10,340	10,713	373
Palm Beach	Palm Beach Kennel Club Poker Room	75,770	78,505	2,735
Pinellas	Derby Lane	48,095	49,831	1,736
Sarasota	Sarasota Kennel Club, Inc.	20,907	21,662	755
Seminole	Sanford-Orlando Kennel Club; Orlando Jai-Alai	17,237	17,859	622
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	11,564	11,981	417
St. Lucie	Fort Pierce Jai-Alai	7,576	7,849	273
Volusia	Daytona Beach Kennel Club, Inc.	21,936	22,728	792
Washington*	Ebro Greyhound Park	572	593	21

Source: Spectrum Gaming Group; Bureau of Labor Statistics; Cotti (2008)

Figure 22: Pari-mutuel counties, leisure & hospitality: average weekly wages with racino added

County	Property	2012 Avg. Wages	2012 Est. W/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	331	339	8
Clay	Orange Park Kennel Club, Inc.	342	350	8
Duval	Jacksonville Greyhound Racing, Inc.	461	472	11
Escambia	Pensacola Greyhound Racing, LLP	308	315	7
Gadsden	Gretna Racing, LLC	285	291	6
Hamilton	Hamilton Jai Alai and Poker	301	308	7
Jefferson	Jefferson County Kennel Club, Inc.	245	251	6
Lee	Naples Fort Myers Greyhound Track	382	391	9
Marion	Ocala Poker & Jai-Alai	319	326	7
Palm Beach	Palm Beach Kennel Club Poker Room	465	476	11
Pinellas	Derby Lane	391	400	9
Sarasota	Sarasota Kennel Club, Inc.	409	418	9
Seminole	Sanford-Orlando Kennel Club; Orlando Jai-Alai	356	364	8
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	391	400	9
St. Lucie	Fort Pierce Jai-Alai	323	330	7
Volusia	Daytona Beach Kennel Club, Inc.	344	352	8
Washington	Ebro Greyhound Park	317	324	7

Source: Spectrum Gaming Group; Bureau of Labor Statistics; Cotti (2008)

3. Other Services

Lastly, we show the estimated impact on of adding machine games to pari-mutuels for the “Other Services” sector. Tables showing the number of establishments (+4.39 percent), number employed (+2.03 percent), and average weekly wages (+3.36 percent) are shown below.

Figure 23: Pari-mutuel counties, other services: number of establishments with racino added

County	Property	2012 No. Establ.	2012 Est. w/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	1,267	1,323	56
Clay	Orange Park Kennel Club, Inc.	371	387	16
Duval	Jacksonville Greyhound Racing, Inc.	2,589	2,703	114
Escambia	Pensacola Greyhound Racing, LLP	720	752	32
Gadsden	Gretna Racing, LLC	71	74	3
Hamilton	Hamilton Jai Alai and Poker	22	23	1
Jefferson	Jefferson County Kennel Club, Inc.	31	32	1
Lee	Naples Fort Myers Greyhound Track	1,585	1,655	70
Marion	Ocala Poker & Jai-Alai	644	672	28
Palm Beach	Palm Beach Kennel Club Poker Room	5,280	5,512	232
Pinellas	Derby Lane	2,729	2,849	120
Sarasota	Sarasota Kennel Club, Inc.	1,304	1,361	57
Seminole	Sanford-Orlando Kennel Club; Orlando Jai-Alai	1,078	1,125	47
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	503	525	22
St. Lucie	Fort Pierce Jai-Alai	463	483	20
Volusia	Daytona Beach Kennel Club, Inc.	1,211	1,264	53
Washington	Ebro Greyhound Park	33	34	1

Source: Spectrum Gaming Group; Bureau of Labor Statistics

Figure 24: Pari-mutuel counties, other services: number employed with racino added

County	Property	2012 Employment	2012 Est. W/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	5,617	5,731	114
Clay	Orange Park Kennel Club, Inc.	1,349	1,376	27
Duval	Jacksonville Greyhound Racing, Inc.	11,618	11,854	236
Escambia	Pensacola Greyhound Racing, LLP	3,660	3,734	74
Gadsden	Gretna Racing, LLC	164	167	3
Hamilton	Hamilton Jai Alai and Poker	65	66	1
Jefferson	Jefferson County Kennel Club, Inc.	140	143	3
Lee	Naples Fort Myers Greyhound Track	6,992	7,134	142
Marion	Ocala Poker & Jai-Alai	2,483	2,533	50
Palm Beach	Palm Beach Kennel Club Poker Room	21,818	22,261	443
Pinellas	Derby Lane	11,547	11,781	234
Sarasota	Sarasota Kennel Club, Inc.	5,418	5,528	110
Seminole	Sanford-Orlando Kennel Club; Orlando	5,603	5,717	114
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	2,682	2,736	54
St. Lucie	Fort Pierce Jai-Alai	2,261	2,307	46
Volusia	Daytona Beach Kennel Club, Inc.	5,135	5,239	104
Washington	Ebro Greyhound Park	77	79	2

Source: Spectrum Gaming Group; Bureau of Labor Statistics; Cotti (2008)

Figure 25: Pari-mutuel counties, other services: average weekly wages with racino added

County	Property	2012 Avg. Wages	2012 Est. w/Racino	Change
Brevard	Melbourne Greyhound Park, LLC	554	573	19
Clay	Orange Park Kennel Club, Inc.	464	480	16
Duval	Jacksonville Greyhound Racing, Inc.	657	679	22
Escambia	Pensacola Greyhound Racing, LLP	616	637	21
Gadsden	Gretna Racing, LLC	488	504	16
Hamilton**	Hamilton Jai Alai and Poker	423	437	14
Jefferson**	Jefferson County Kennel Club, Inc.	380	393	13
Lee	Naples Fort Myers Greyhound Track	570	589	19
Marion	Ocala Poker & Jai-Alai	459	474	15
Palm Beach	Palm Beach Kennel Club Poker Room	647	669	22
Pinellas	Derby Lane	654	676	22
Sarasota	Sarasota Kennel Club, Inc.	574	593	19
Seminole	Sanford-Orlando Kennel Club; Orlando Jai-Alai	749	774	25
St. Johns	St. Johns Greyhound Park (Bayard Raceways)	1,021	1,055	34
St. Lucie	Fort Pierce Jai-Alai	455	470	15
Volusia	Daytona Beach Kennel Club, Inc.	828	856	28
Washington*	Ebro Greyhound Park	495	512	17

Source: Spectrum Gaming Group; Bureau of Labor Statistics; Cotti (2008)

As with the leisure and hospitality supersector, the addition of machine games at existing pari-mutuels is expected to provide modest economic benefits in the “Other Services” sector.

Although we have provided specific forecasts for these variables, it should be noted that each county is unique, as are the pari-mutuel properties. In addition we have no information the sizes of the prospective “racinos.” Nevertheless, previous empirical evidence based on US countrywide data suggests that the estimated impacts shown in the tables above are reasonable projections. Furthermore, it would be unlikely that the addition of slot machines to existing pari-mutuels would have starkly different impacts at different locations.

Prospective Casino Counties

We now turn to an analysis of the likely effect on various economic variables assuming a single destination resort casino is added to a county. We have previously discussed the assumption about the novelty effect of new casinos, even in counties with existing Native American casinos or pari-mutuels. As noted above, we assume that the introduction of a stand-alone casino has roughly the same impact as a large “racino” development, as analyzed in the previous sub-section.

Next we present the estimated impacts on employment and average wages in Broward, Hillsborough, Miami-Dade, and Orange Counties. These projections utilize the Cotti paper estimates, as well as some estimates from the peer counties. Projections based on peer counties are based on the one-year change in variables around the casino opening. The projections are based on trends in the county’s data, and are adjusted for the seasonal component of the trend. The discussion is organized by county.

1. Broward County

Broward County is immediately north of Miami-Dade county, stretching from Hollywood to north of Pompano Beach. As noted earlier, it is a relatively large population county, with a high population density. We provide the projected casino effects for the leisure and hospitality sector (of which the casino would be part), for “Other Services,” and for “All Industries.”

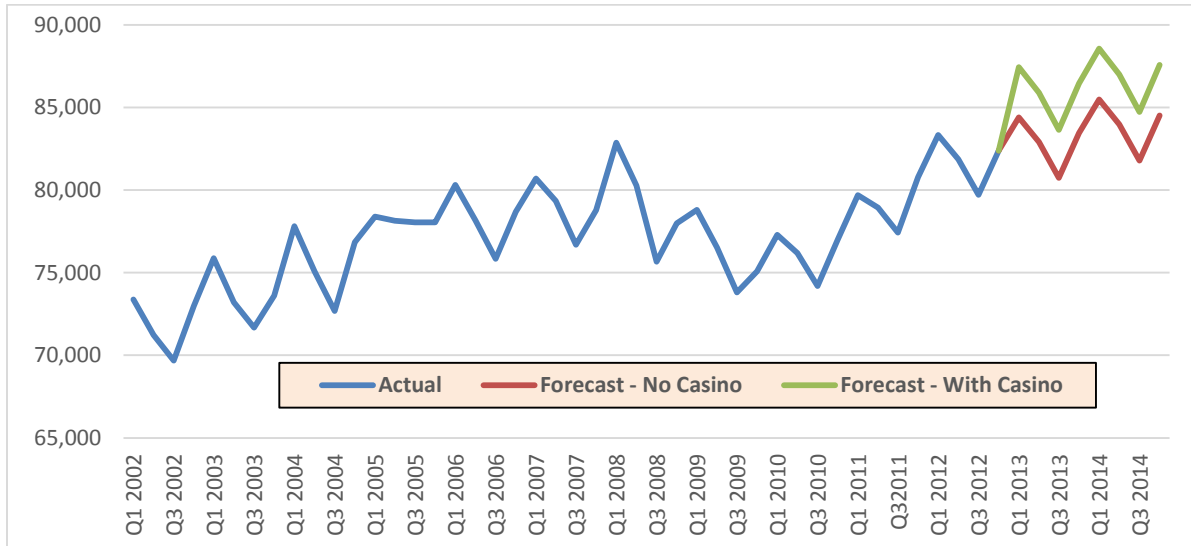
a. Leisure & Hospitality Sector

We first project the employment effect of a casino opening in the first quarter of 2013. The projection is based on Cotti’s estimated employment effect for “large” counties, 3.61 percent. The figure below presents the actual data on county-level employment in the leisure and hospitality sector. It also shows the projected values through 2014 for employment if a casino had been introduced at the beginning of 2013, compared to projections assuming the same trend continues in the absence of a casino. The difference between the two projection lines reflects the 3.61 percent estimated casino effect on this variable.

As noted before, there is a lot of seasonal variation in employment that has been incorporated into the projected values. By the end of 2014, it is estimated that there would be an additional 3,051 jobs in this sector, compared to if no casino was introduced. (This value, along

with the analogous value for other counties and sectors will be summarized later in the report.) That is, at the far right of the grey lines, the vertical difference is 3,051 jobs.

Figure 26: Number employed projection in leisure & hospitality sector: Broward County

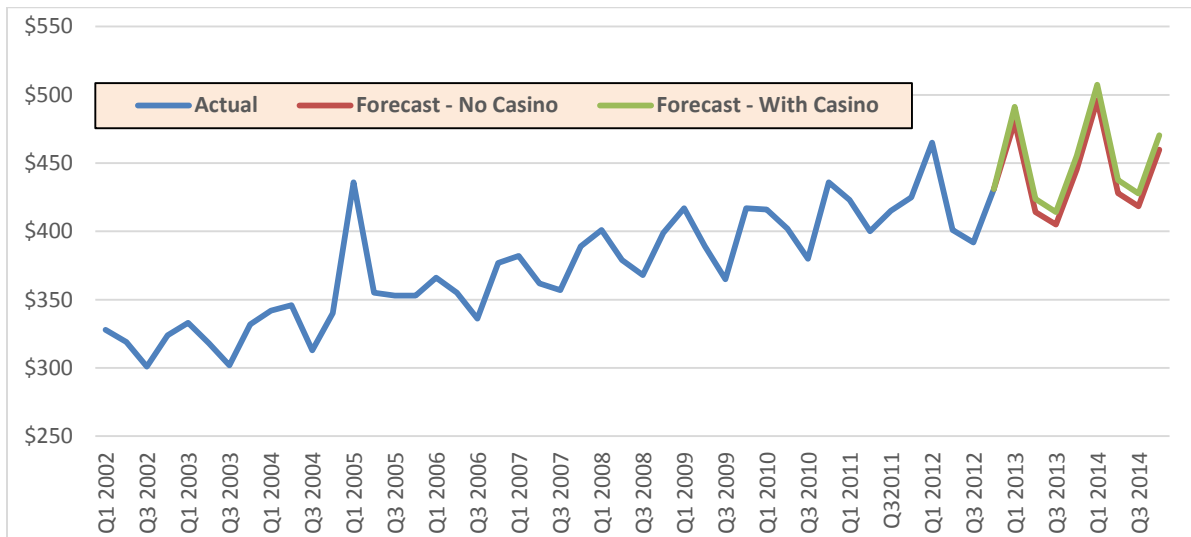


Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

In the chart below we project the effect of casino introduction on average weekly wages in the leisure and hospitality sector for Broward County. The casino effect on average wages is relatively minor, amounting to a difference of \$10.49 per week (by the end of 2014). As with the employment effect, average weekly wage effects are based on Cotti’s estimate for large population counties.

The relatively insignificant wage effect is perhaps not surprising, as the casino would not be expected to put much upward pressure on wages, especially to the extent unemployment exists in the county, and the casino hires workers from the pool of unemployed workers.

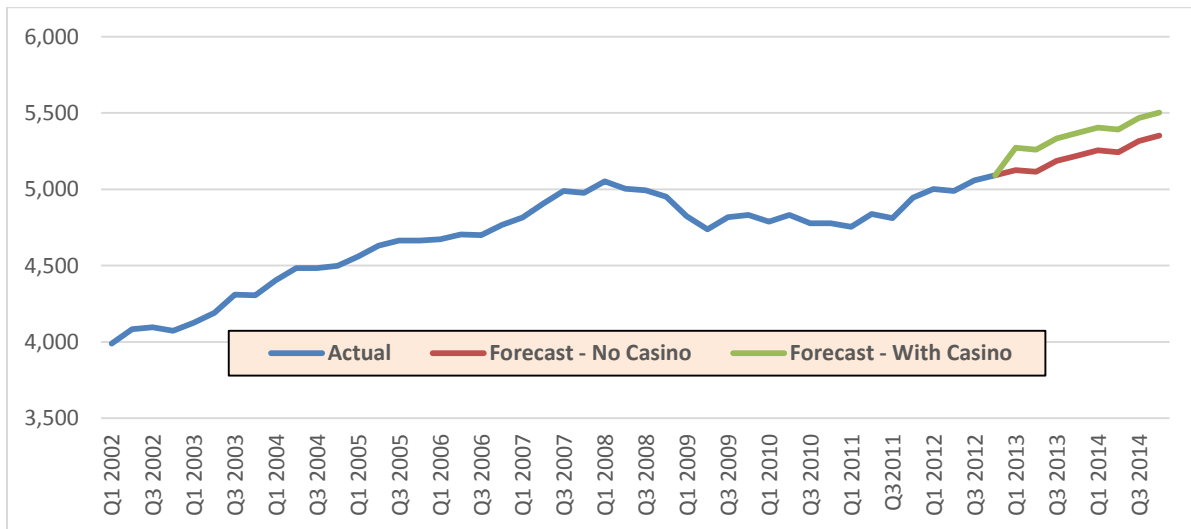
Figure 27: Average weekly wages projection in leisure & hospitality sector: Broward County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The final projections for the leisure and hospitality sector are for the number of establishments. These projections are based on peer county experience, as described earlier. There are estimated to be 153 additional establishments by the end of 2014.

Figure 28: Number of establishments projection in leisure & hospitality sector: Broward County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

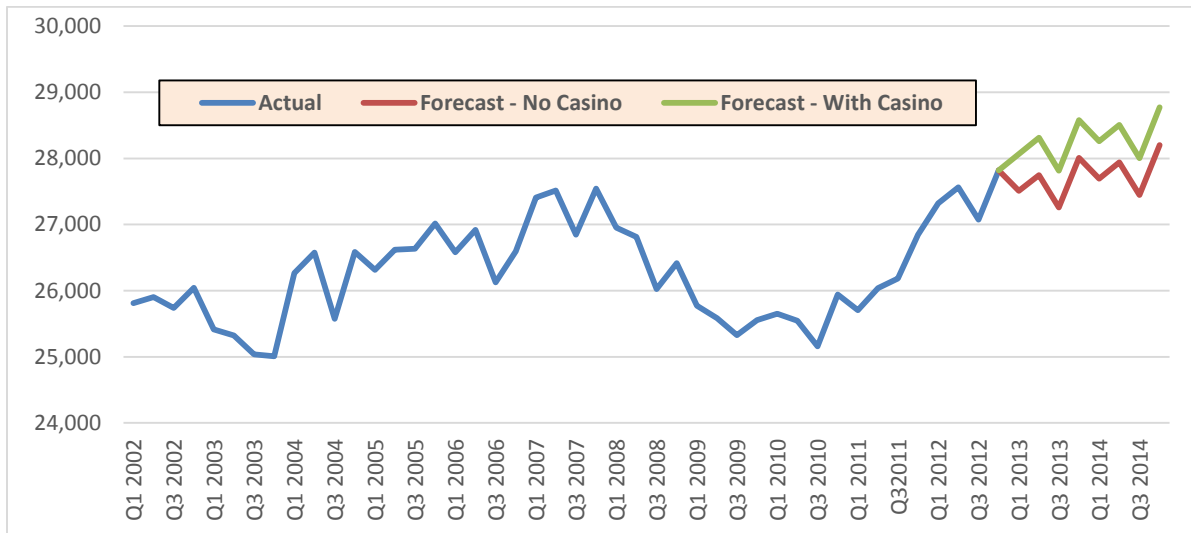
b. "Other Services"

There are a variety of businesses that are not categorized into even narrow industry classifications under the NAICS. Those service-providing firms that are not otherwise categorized are grouped into the category, "other services." We estimate the impact of casino

introduction on this sector, even though we would not expect there to be any relationship between casinos and the firms in this categorization. However, testing the casino effect provides information on whether or not there is complementarity or substitution among casinos and these seemingly unrelated businesses.

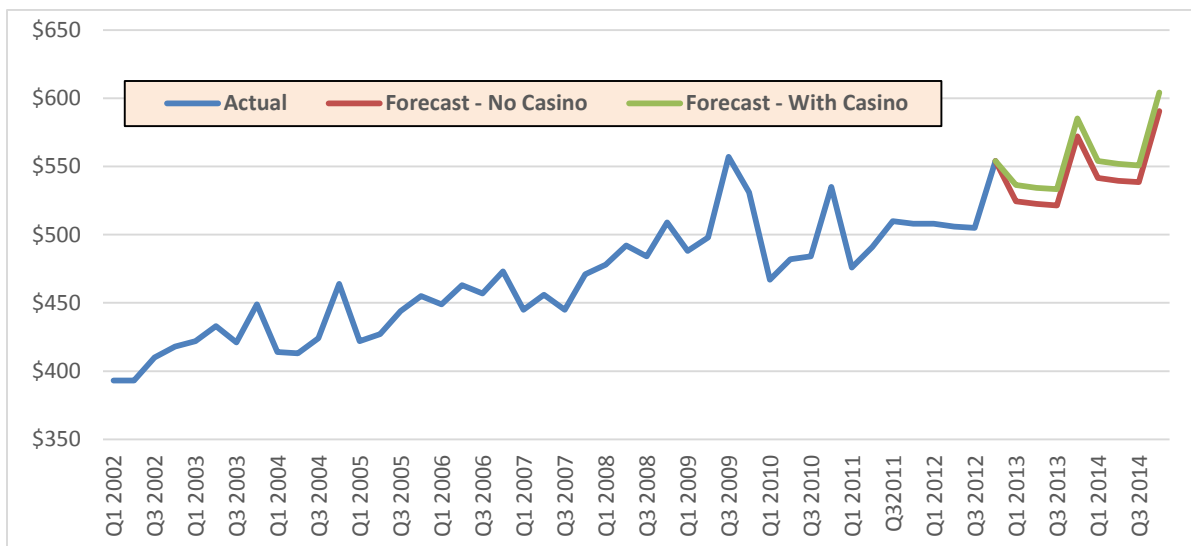
As explained above, the before- and after-casino trends in non-Florida peer counties are used to estimate the likely impact of casino introduction. The results for Other Services employment (572), average weekly wages (\$13.47), and number of establishments (258), are presented in the figures below.

Figure 29: Number employed projection in other services: Broward County



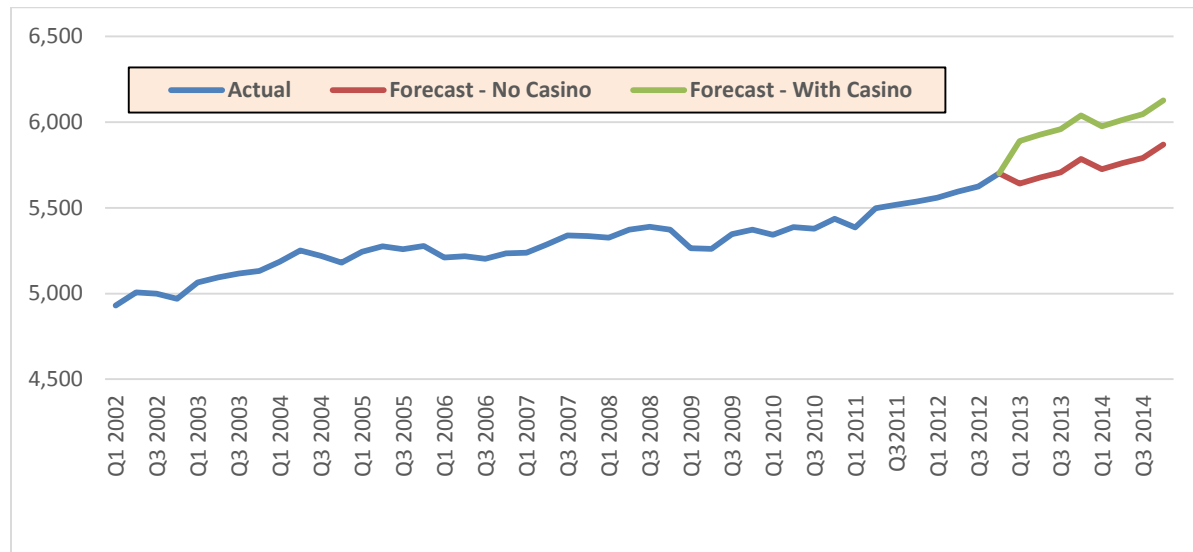
Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Figure 30: Average weekly wage projection in other services: Broward County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Figure 31: Number of establishments projection in other services: Broward County



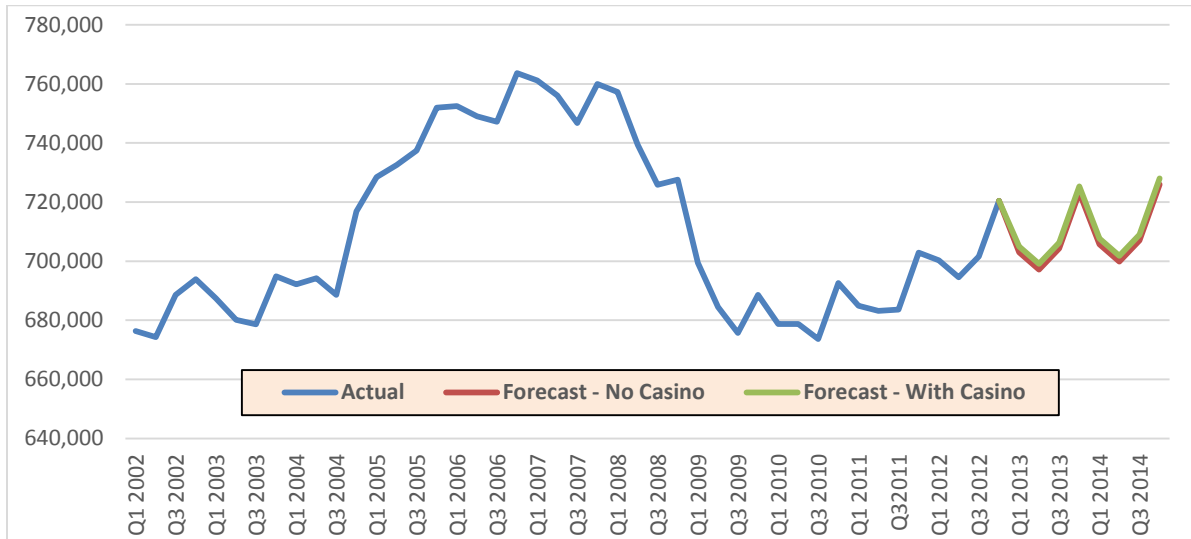
Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

c. "All Industries"

Next, we examine the projected changes for "All Industries" in Broward County. Generally, the impacts for all counties will always be smaller, in percentage terms, than they will be for the more narrowly-defined leisure and hospitality sector. We follow the same order in discussion as above, showing the estimated employment effect, followed by the average weekly wages, and number of establishments.

Cotti estimates very small, effects of casinos for countywide employment and wages, at least for large population counties. As noted earlier, the estimated employment effect is only 0.28 percent, while the wage effect is -0.12 percent. Neither of these effects is statistically significantly different from zero. As a result, the projected impacts shown in the figure below are indeed very minor, almost indistinguishable from the no-casino trend.

Figure 32: Employment projection in all industries: Broward County

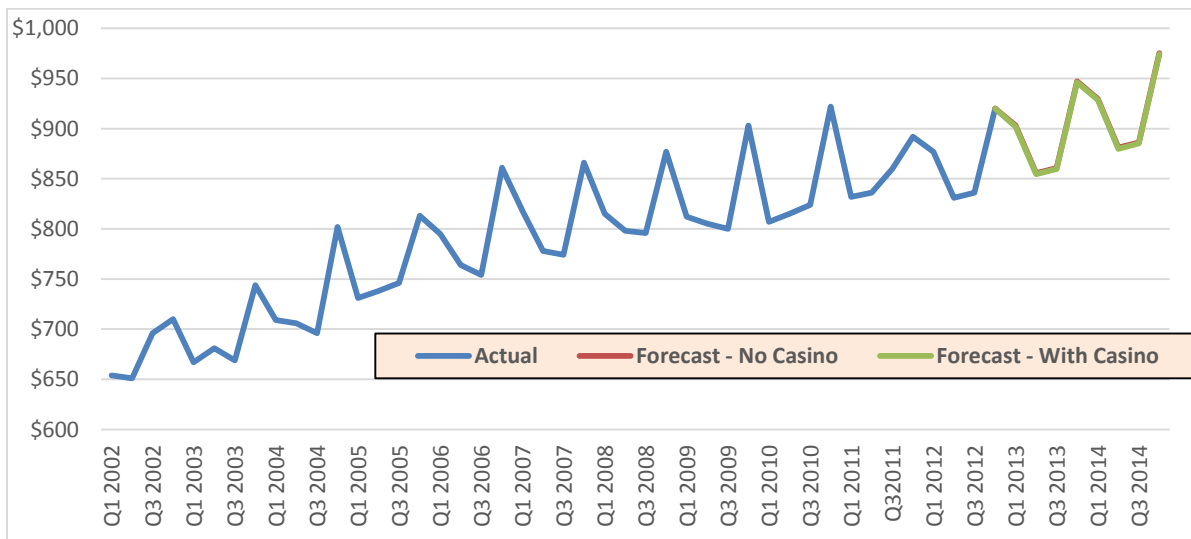


Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The estimated employment effect amounts to 2,033 new jobs attributable to casinos, by the fourth quarter of 2014.

The average weekly wage effect is almost nil, a statistically insignificant $-\$1.17$. The difference is so small that it does not show up in a graphical depiction. (For Broward, we present the graph, but for the sake of brevity, we omit the “all industries” wage chart for other counties.) The estimated 2014Q4 wage without a casino in Broward County is $\$975.23$; with a casino it is $\$974.06$.

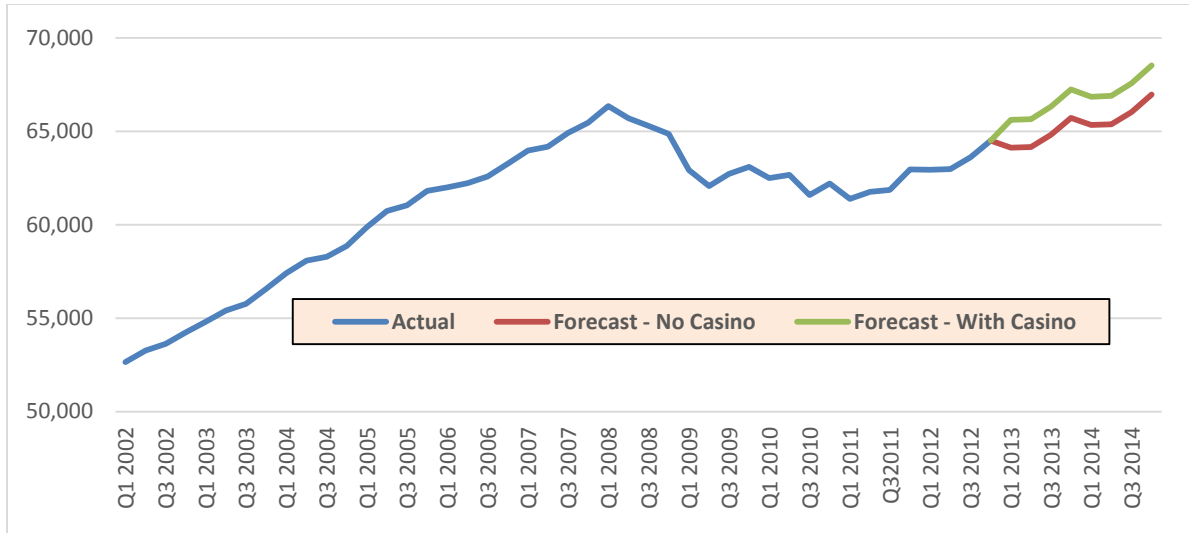
Figure 33: Average weekly wages projection in all industries: Broward County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Lastly, the estimated casino impact on the number of establishments for Broward County is illustrated in the chart below. As noted earlier, these estimates are based on the experience in peer counties, since Cotti did not provide estimated effects on this variable.

Figure 34: Number of establishments projection in all industries: Broward County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

By the end of 2014, Broward is projected to have 1,553 more establishments with a casino than without one.

It should again be emphasized that the projections based on the peer counties are less reliable than the projections based on the Cotti estimates. This is because Cotti’s estimated impacts are the result of regression analysis which controls for demographic and economic factors that could affect the results. The estimated effects based on the peer counties do not control for these other factors, so we cannot be as confident that the projected impacts are not the result of other, confounding influences.

2. Hillsborough County

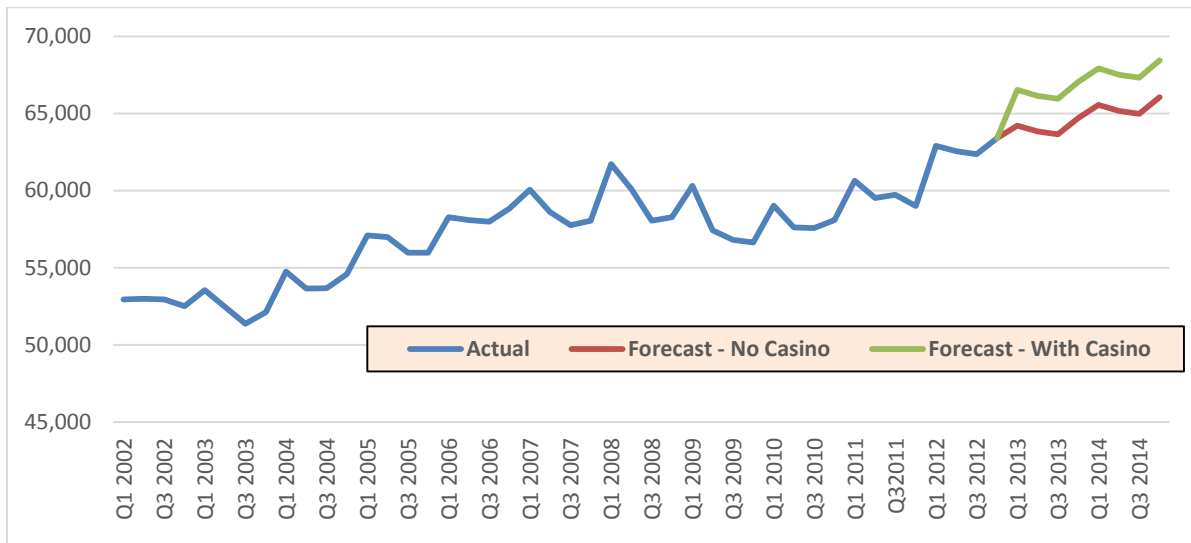
Hillsborough County includes Tampa and other smaller cities. As with the other counties considered by Spectrum to be likely candidates to host a commercial casino if casinos are legalized, Hillsborough has a relatively high population (over 1.2 million).

We present the projected casino impacts for Tampa/Hillsborough County below. However, since we saw in the case of Broward County, the impacts on “All Industries” employment and wages are relatively minor, we omit these graphical presentations.

a. Leisure & Hospitality

The projected employment effect for the Hillsborough County leisure and hospitality sector is 2,385 jobs, as shown below.

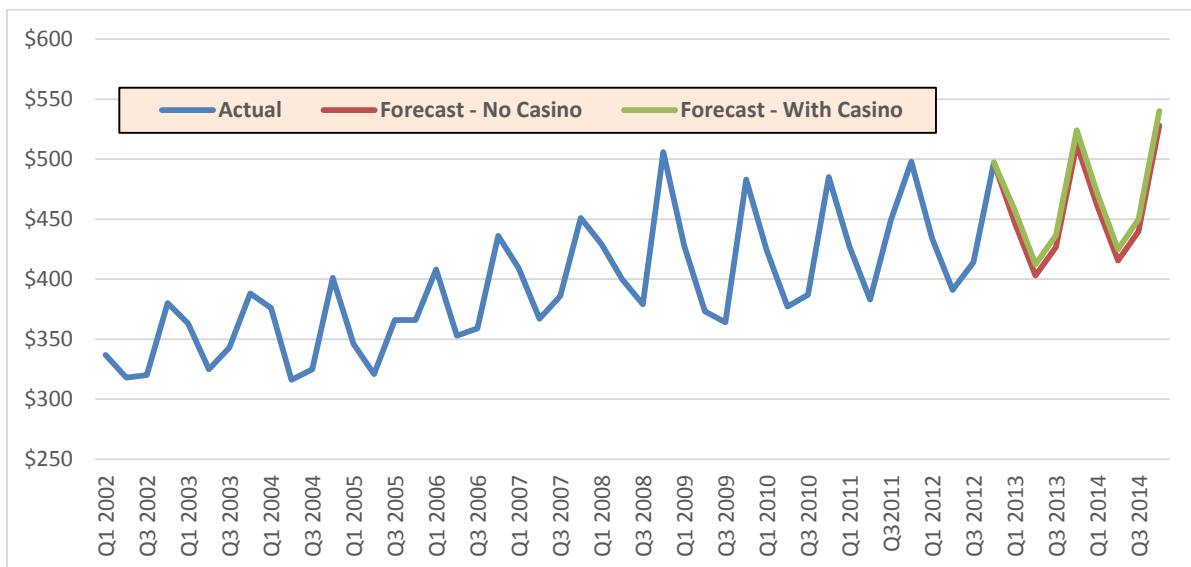
Figure 35: Number employed projection in leisure & hospitality: Hillsborough County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The wage effect illustrated in the figure below is \$12.04 (again, at the end of 2014).

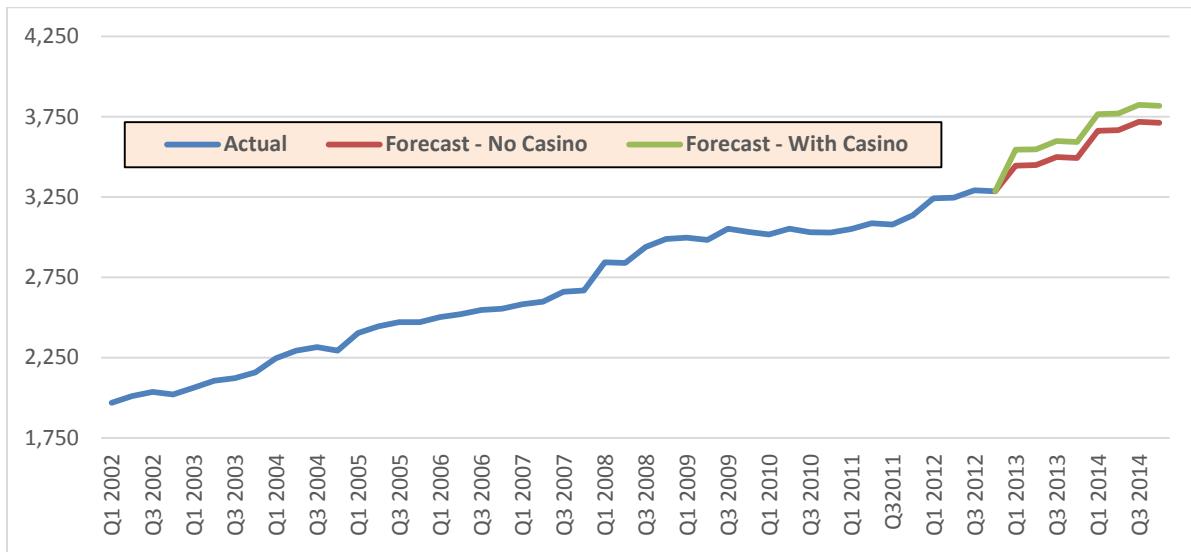
Figure 36: Average weekly wages projection in leisure & hospitality: Hillsborough County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Lastly, we present the predicted change in number of establishments (106) for the leisure and hospitality sector in Hillsborough County.

Figure 37: Number of establishments in leisure & hospitality: Hillsborough County

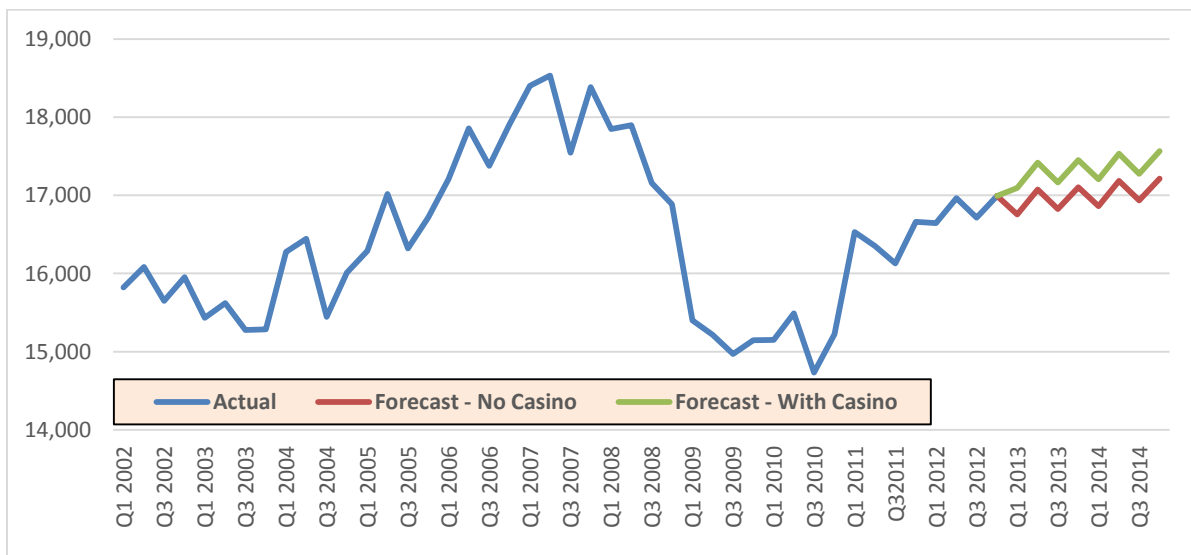


Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

b. Other Services

Next we present the estimated impacts on “Other Services,” for employment, average weekly wages, and number of establishments, based on the trends from peer counties. The employment effect is estimated to be 349 jobs.

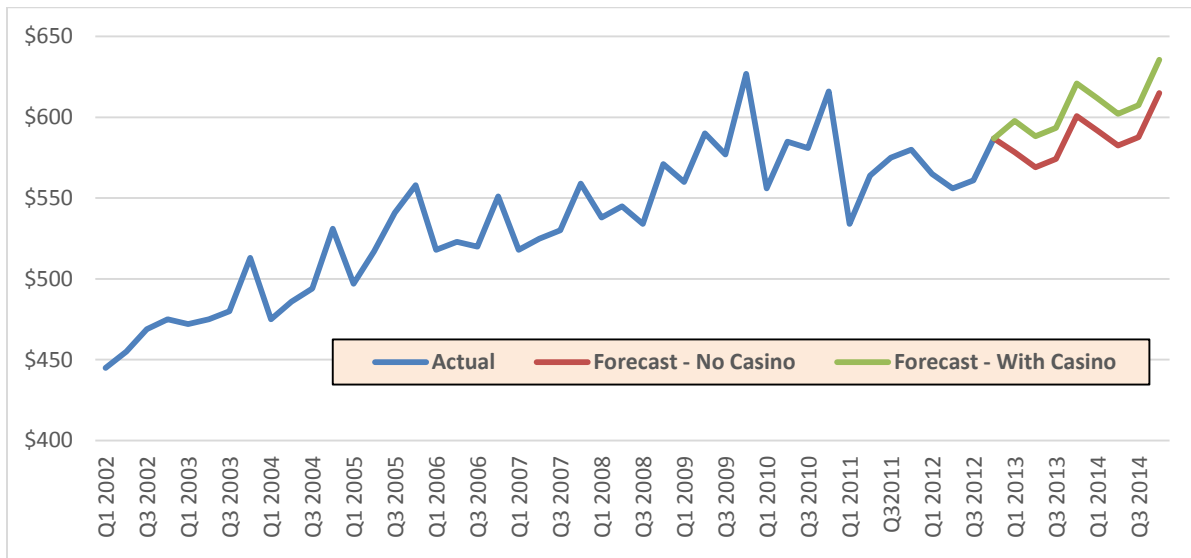
Figure 38: Number employed projection in other services: Hillsborough County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The predicted effect on payroll, as shown in the figure below, is \$20.66.

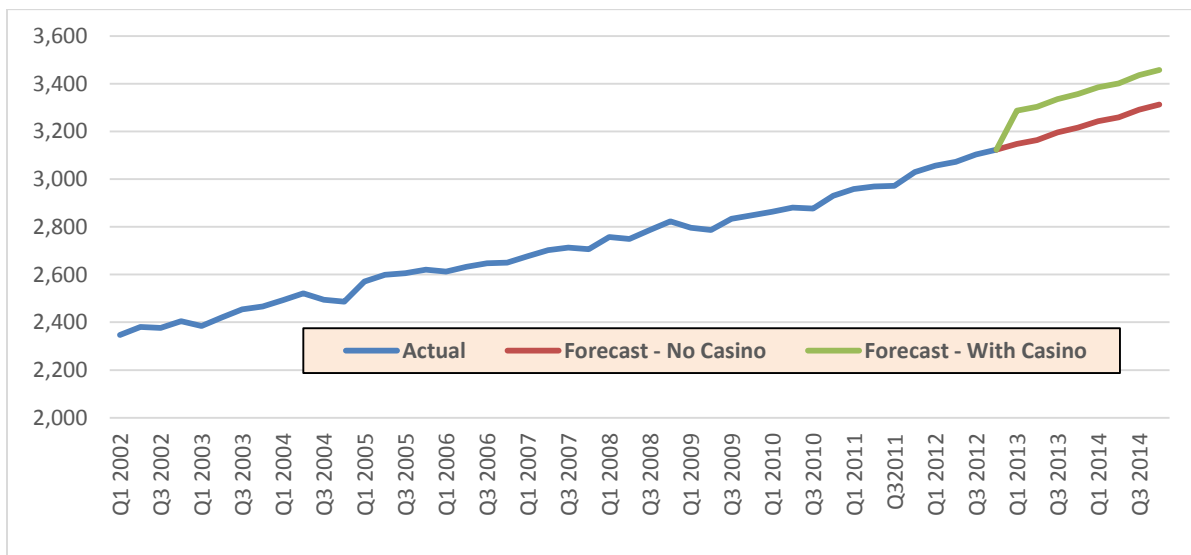
Figure 39: Average weekly wages projection in other services: Hillsborough County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Finally, the predicted effect on the number of establishments in “Other Services” (145) is shown below.

Figure 40: Number of establishments projection in other services: Hillsborough County

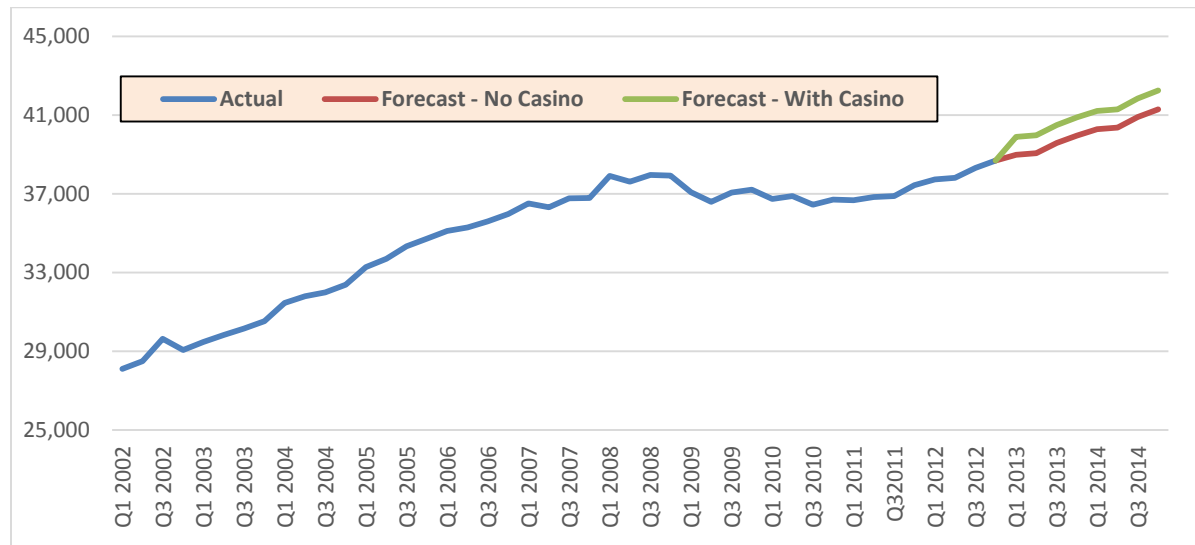


Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

c. All Industries

Next we show the results on the number of establishments for “All Industries.” The projection is that there will be 958 more establishments with a casino than without in Hillsborough County.

Figure 41: Number of establishments in all industries: Hillsborough County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

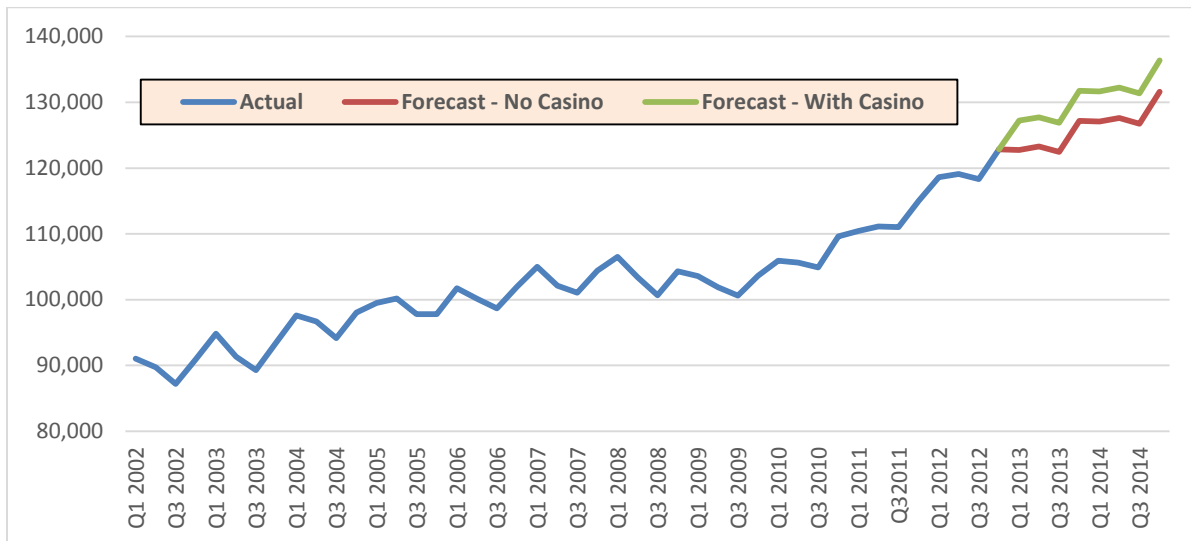
3. Miami-Dade County

Miami-Dade County obviously has a well-developed tourism industry with its beaches and other attractions. In addition, there are already a variety of legal gambling options for consumers. Nevertheless, the introduction of a casino in Miami is projected to have a meaningful impact on employment, as shown in the figure below.

a. Leisure & Hospitality

By the fourth quarter of 2014, the prediction is that there will be 4,751 more jobs in the leisure and hospitality industry if a commercial casino were to open, compared to the status quo case.

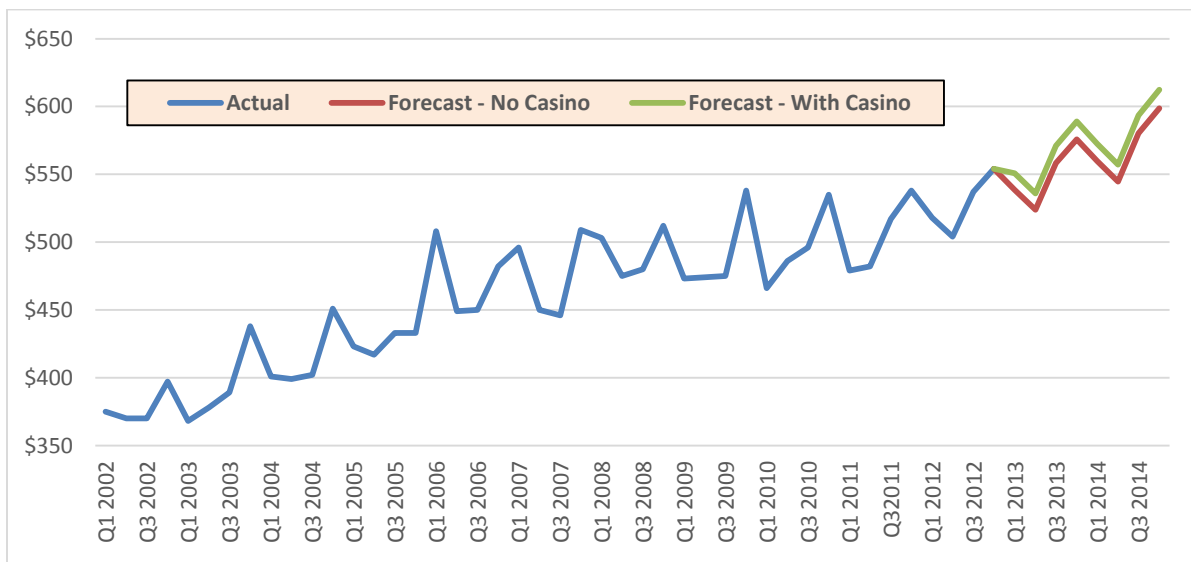
Figure 42: Number employed projection in leisure & hospitality: Miami-Dade County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The anticipated casino effect on average weekly wages is shown below. At the end of 2014, the number if a casino is introduced is estimated to be \$13.65 higher than if no casino is added to Miami.

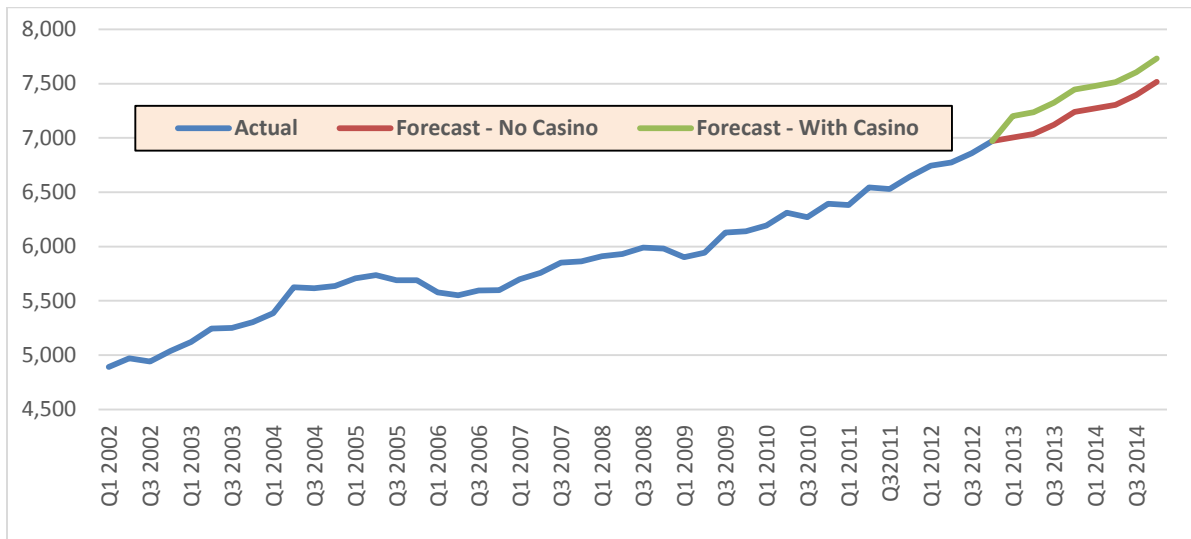
Figure 43: Average weekly wages projection in leisure & hospitality: Miami-Dade County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Next for the leisure and hospitality sector we present the expected casino effect on number of establishments. The introduction of a casino is projected to increase the number of establishments by 214.

Figure 44: Number of establishments projection in leisure & hospitality: Miami-Dade County



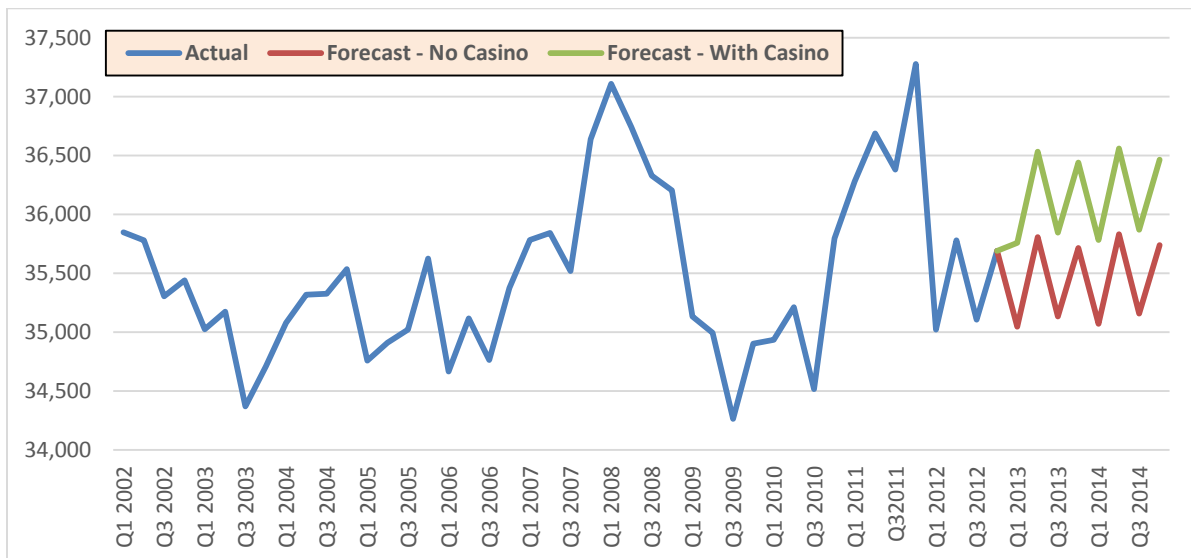
Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

b. Other Services

Next we present the estimated impacts on “Other Services,” for employment, average weekly wages, and number of establishments, for Miami-Dade County, based on the trends from peer counties.

The chart on projected employment shows that with a commercial casino added to Miami-Dade, there are expected to be an addition 726 jobs in the Other Services sector.

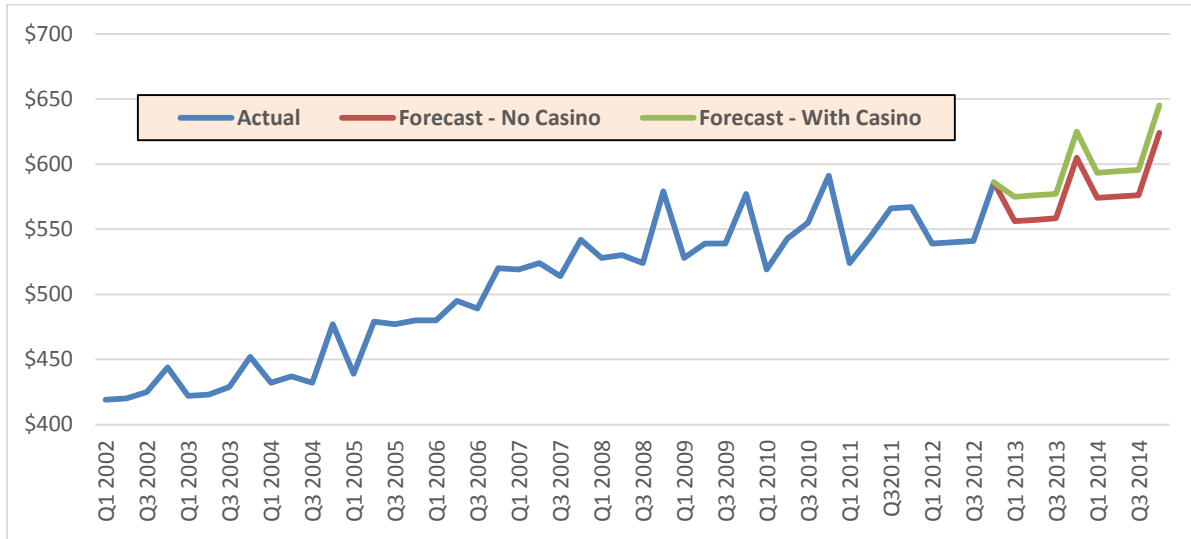
Figure 45: Number employed projection in other services: Miami-Dade County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Next we show the anticipated effect of a casino on average weekly wages (\$20.97).

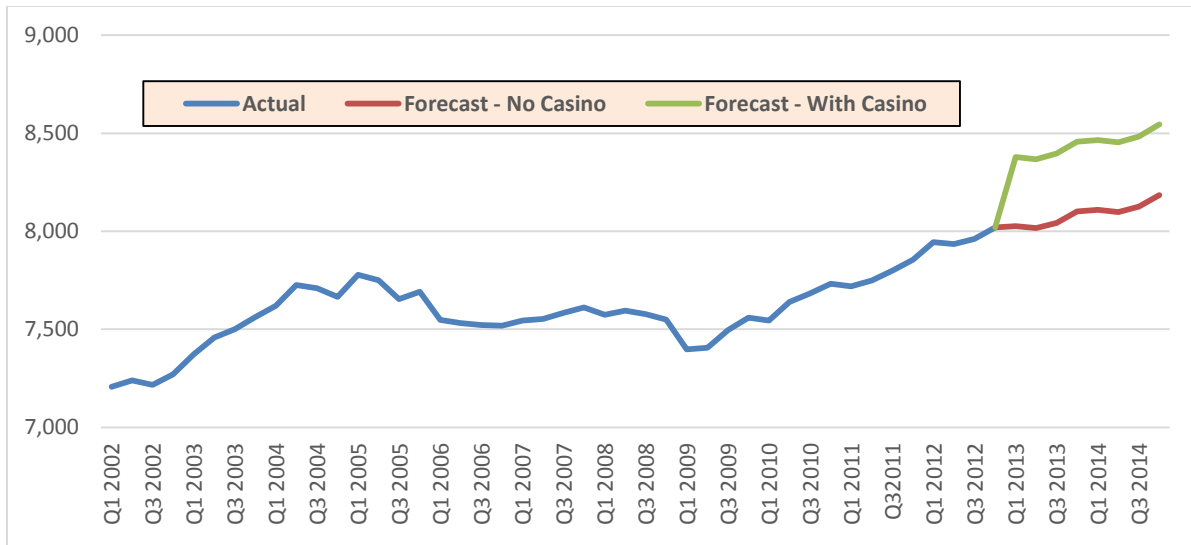
Figure 46: Average weekly wages projection in other services: Miami-Dade County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Finally, the projection is that there would be an addition 359 establishments in “Other Services” by the end of 2014 if a commercial casino were opened in the county.

Figure 47: Number of establishments projection in leisure & hospitality: Miami-Dade County

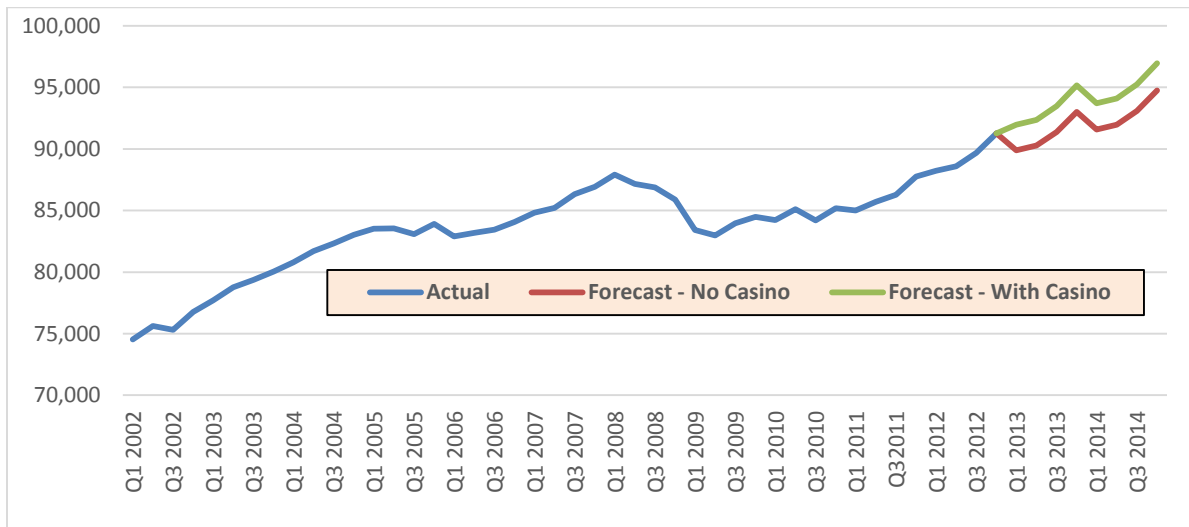


Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

c. All Industries

Our projection indicates a significant increase in total number of establishments due to a commercial casino, of 2,198.

Figure 48: Number of establishments projection in all industries: Miami-Dade County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

4. Orange County

Orange County is probably best known for Walt Disney World, obviously a major tourist attraction for the state. The introduction of a casino in Orlando, or near Walt Disney World, would probably be more controversial than the introduction of a casino in the other counties being considered. Many people with moral concerns about state-sanctioned gambling may object to building a casino near a family-oriented attraction like Walt Disney World. Nevertheless, because a large number of tourists visit Orlando each year, Orange County could be considered as a host county for a new casino.

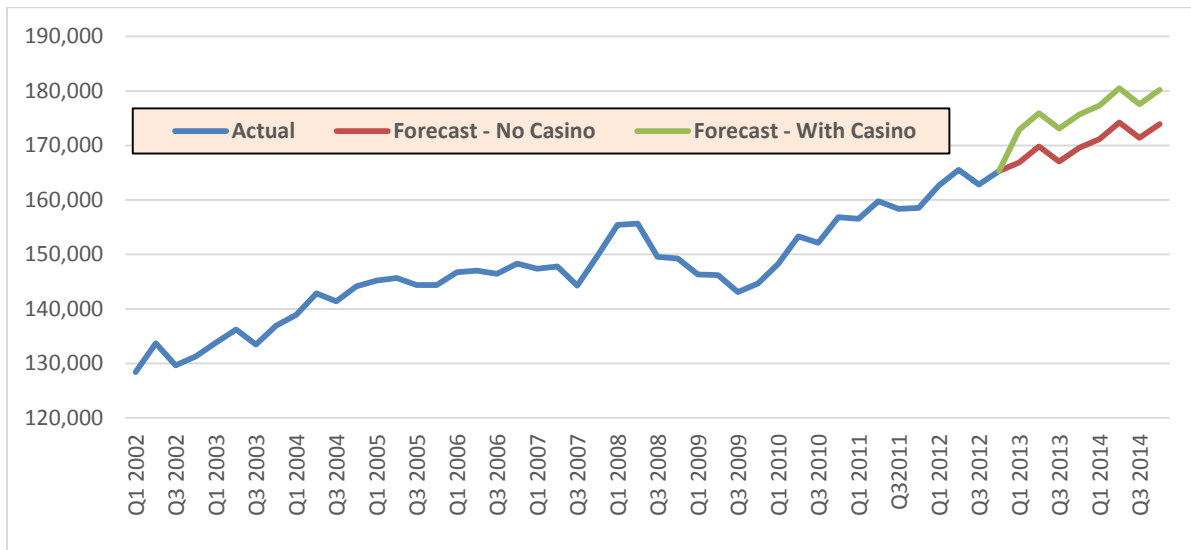
As was true of the other counties previously considered, Orange County is among the top 1 percent populated counties in the United States. (It has about 1.2 million people.) For this reason, we again utilize Cotti’s estimates based on the top-third highest population US counties. Where Cotti estimates are not available, we again utilize the estimates created from peer-county data.

As above, we present graphical depictions of the estimated casino effects on leisure & hospitality sector employment, wages, and number of establishments. We show the same for “Other Services,” but show only the number of establishments for “All Industries” since the effects on payroll and employment are basically zero.

a. Leisure & Hospitality

The first figure shows the estimated employment impact for Orange County’s leisure and hospitality industry, assuming the 2013 opening of a casino. By the end of 2014, we would anticipate there being 6,279 more jobs if a casino is opened, compared to the no-casino case.

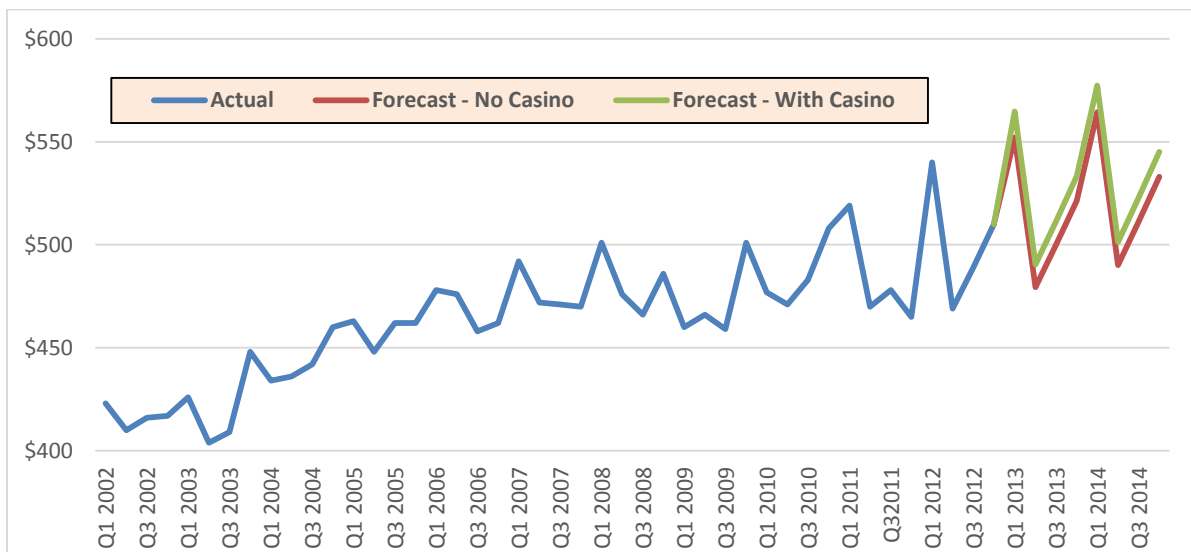
Figure 49: Number employed projection in leisure & hospitality: Orange County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The estimated average weekly wages effect is illustrated in the chart below. The results are similar to the projections for other counties, with wages increasing by about \$12.15 by the end of 2014.

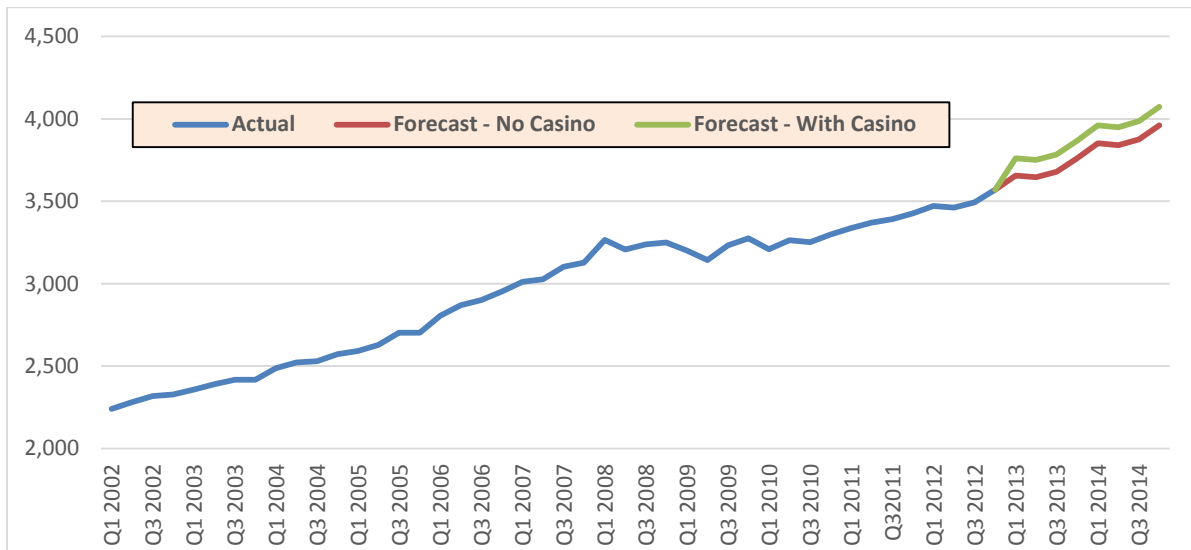
Figure 50: Average weekly wages projection in leisure & hospitality: Orange County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

The projections for number of establishments is shown below. The addition of a casino is projected to increase the number of leisure & hospitality establishments by 113.

Figure 51: Number of establishments in leisure & hospitality: Orange County

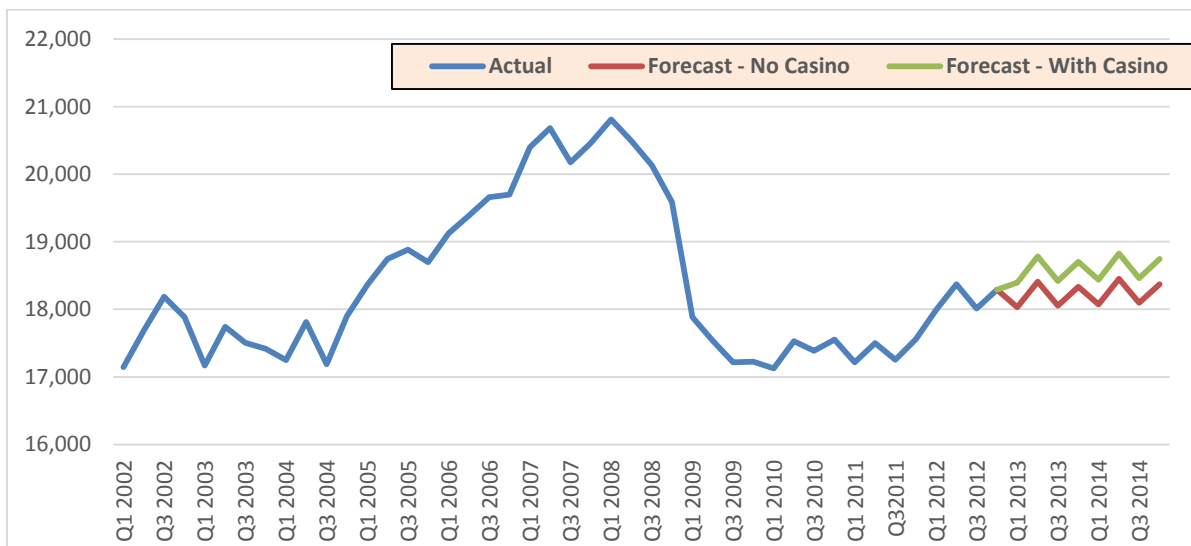


Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

b. Other Services

Next we present the estimated impacts on “Other Services,” for employment, average weekly wages, and number of establishments, for Orange County. The introduction of a casino is expected to increase the number of jobs in this sector by 373.

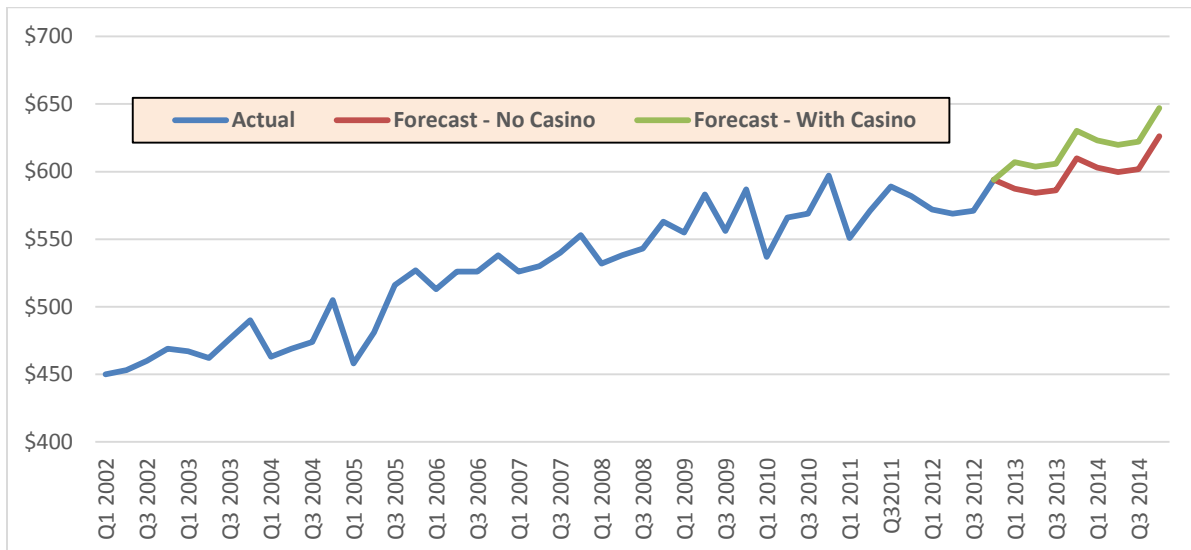
Figure 52: Number employed projection in other services: Orange County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

In terms of average weekly wages in other services, they are expected to increase by \$21.04, as shown in the figure below.

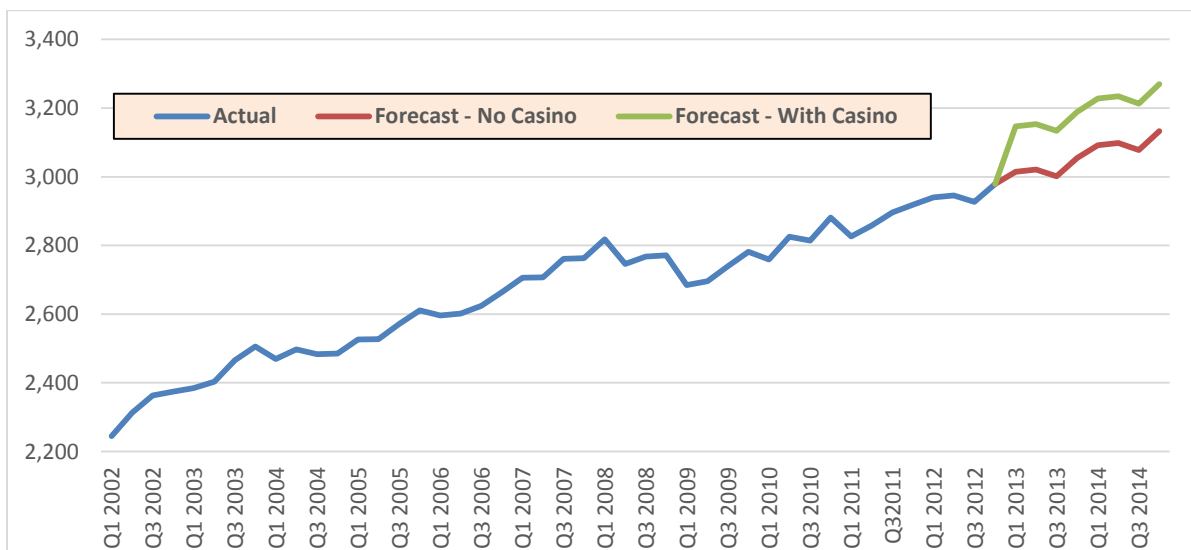
Figure 53: Average weekly wages projection in other services: Orange County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Lastly, the number of other services establishments is projected to increase by 138 with the introduction of a commercial casino.

Figure 54: Number of establishments in other services: Orange County



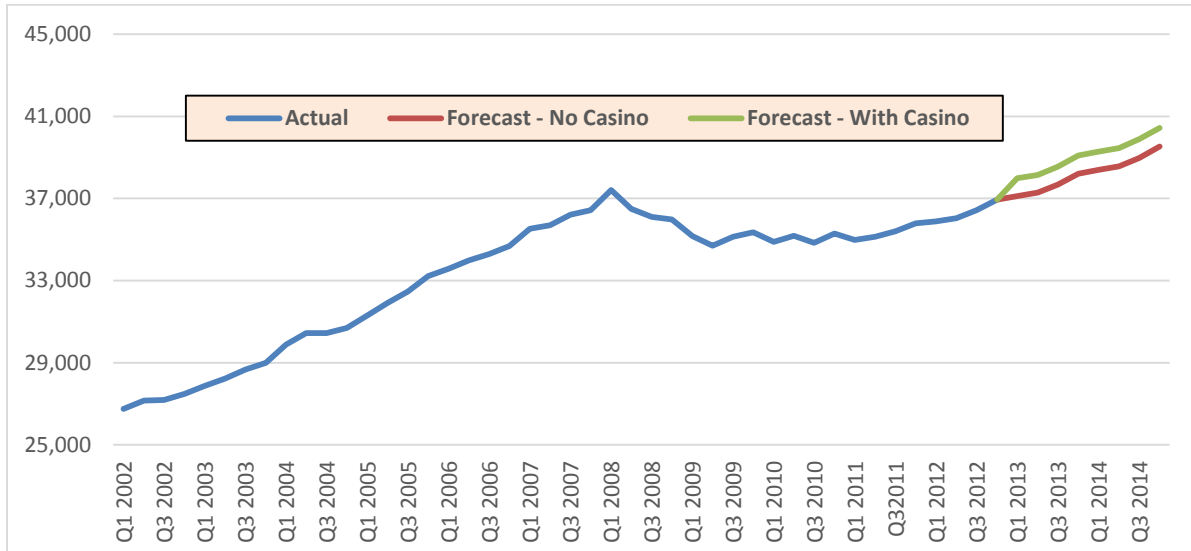
Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

c. All Industries

As noted in for the other prospective casino counties discussed above, the project impact of a casino in Orange County on employment and average payroll – countywide – is essentially

zero. Therefore, we present only the figure illustrating the projected change in the number of establishments (917).

Figure 55: Number of establishments in all industries: Orange County



Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Summary of Results

Our analysis has focused on the employment and wage impacts, as well as local business patterns, of adding machine games at existing pari-mutuels in Florida and of introducing commercial casinos in selected counties in Florida.

Based on the empirical evidence from the literature and our analysis in selected peer counties, the expectation is that the economic impacts of casinos in highly populated counties are relatively minor. Nevertheless, for the industry sectors we have considered, there are benefits that accrue within those sectors. Employment, average wages, and number of business firms are all projected to increase with the expansion of casinos either at existing pari-mutuels or at new locations in the state.

In the table below we present the estimated employment and average weekly wage effects of introducing a stand-alone casino. The projected changes are for the fourth quarter of 2014, which is the eighth quarter after the casino is assumed to open (at the beginning of 2013). These projections are based on the Cotti estimated casino impacts for large population counties, as well as the peer counties, in the case of variables for which Cotti did not provide estimates.

Figure 56: Summary results: predicted changes from commercial casino, by county

Sector	Number of Establishments	Number Employed	Average Weekly Wages
Broward County			
Leisure & Hospitality	+ 153	+ 3,053	+ \$10.49
Other Services	+ 258	+ 572	+ \$13.47
All Industries	+ 1,533	--	--
Hillsborough County			
Leisure & Hospitality	+ 106	+2,385	+ \$12.04
Other Services	+ 145	+ 349	+ \$20.66
All Industries	+ 958	--	--
Miami-Dade County			
Leisure & Hospitality	+ 214	+4,751	+ \$13.65
Other Services	+ 359	+ 726	+ \$20.97
All Industries	+2,198	--	--
Orange County			
Leisure & Hospitality	+ 113	+6,279	+ \$12.15
Other Services	+ 138	+ 373	+ \$21.04
All Industries	+ 917	--	--

Source: Data from Bureau of Labor Statistics, Quarterly Census of Employment and Wages (<http://www.bls.gov/cew/>). Projections based on Spectrum Gaming Group calculations using Cotti estimated impacts and peer county estimated impacts.

Since casinos are a component of the leisure & hospitality sector, it may not be surprising that there are positive employment effects expected. Still, the positive results raise doubt about the “substitution effect” within the leisure & hospitality sector. In addition, when we examine “other services” our goal is to determine whether casinos would have a negative impact on seemingly unrelated business firms. Our projections suggest that casinos are complementary to other services.

At the county-level, considering all industries in aggregate, however, it is unclear whether the introduction of casinos will have much of an effect at all on overall employment or on wages. Empirical evidence from the literature suggests that in large counties, the economic impacts of casinos are very minor. When we examine the peer county unemployment rate before and after the introduction of casinos, there is no clear indication that the casino affects the trend in unemployment markedly. This is consistent with the insignificant employment effect found for “All Industries” in the county.

Caveats

As with any empirical analysis, this study provides an analysis based on the data available, and researchers’ best judgment about how to project variables into the future. Obviously there are assumptions that must be made, and the results could vary significantly if the underlying assumptions of the analysis were changed. We believe it is important to point out some key considerations that should be kept in mind when interpreting the results of this study.

First, the estimates are not sensitive to whether there is an existing Native American casino, or other major tourist attraction, in the county. Obviously, these types of factors could

have an important effect on the impacts of a new casino. A much more sophisticated analysis would be needed to control for these factors.

Second, the estimates are not sensitive to the specific size of the casino introduced. There is no known data set that tracks sizes of all casinos in the United States over time. Such data would be impossible to collect, in any case, since casinos routinely expand their property sizes, and there are no property-level historical data on these changes for all US casinos. Obviously the larger the scale of capital investment, the greater the presumed effect on employment and wages.

Third, estimates are just that. There are alternative ways to analyze the data, simpler and more complicated, but there is no reason to believe that undertaking a more technical analysis would yield significantly different results. Ultimately, economic forecasts rely heavily on the assumptions being made. We have attempted to be conservative wherever possible in projecting the economic impacts of casinos in Florida.

VII. State-Level Economic Variables

It is informative to view the preceding analysis and conclusions in the context of more “macro” economic expectations. Therefore, we provide some summary projections at the state-level from analysis by project partner Regional Economic Models Inc. (“REMI”).

Florida, like much of the nation, is still living with the legacy of the financial crisis. In fact, the state fared worse than many others during that time. However, looking forward, Florida’s prospects are better. The table below shows employment in Florida over time and for select sectors. While the average annual growth in total employment may look small at 1 percent, it is higher than the same rate for the nation as a whole, which stands at 0.94 percent. That small difference means that jobs in 2024 compared to 2013 are 12 percent greater in Florida compared to 11 percent for US.

Figure 57: Projected employment in Florida in various sectors, Tax-PI baseline forecast

Category	2013	2014	2015	2016	2017	2018	2019
Total Employment	10,263,389	10,378,393	10,567,281	10,736,302	10,924,360	11,073,582	11,201,520
Performing arts and spectator sports	120,538	121,397	122,932	124,323	125,790	126,721	127,443
Museums, historical sites, zoos, and parks	6,750	6,883	7,048	7,231	7,435	7,611	7,768
Amusement, gambling, and recreation	183,324	185,135	187,665	190,471	193,645	196,050	198,003
Accommodation	175,892	176,381	177,722	178,913	180,178	180,630	180,690
Food services and drinking places	695,998	698,539	704,244	710,509	717,809	721,999	724,238
Category	2020	2021	2022	2023	2024	Avg. Annual Growth	
Total Employment	11,278,543	11,319,371	11,341,968	11,380,502	11,453,282	1.00%	
Performing arts and spectator sports	127,614	127,411	127,108	127,028	127,344	0.50%	
Museums, historical sites, zoos, and parks	7,888	7,981	8,061	8,150	8,258	1.85%	
Amusement, gambling, and recreation	199,067	199,579	199,788	200,169	200,969	0.84%	
Accommodation	179,935	178,731	177,358	176,257	175,673	-0.01%	
Food services and drinking places	722,980	719,133	714,938	711,532	709,884	0.18%	

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Each of the jobs indicated above comes with a paycheck and other compensation. The following table shows total earnings, which is the sum of wages, benefits, and proprietors’ income. In other words, “earnings” is the most comprehensive measure of remuneration received through one’s job. The table shows the relative importance of the tourism-related industries in the state. The average share of total earnings for each sector in Florida is larger and in some cases roughly double that of the same sector in the nation. For example, Food Services comprise

3.29 percent of Florida’s earnings and 2.35 percent of the nation’s. Amusement, gambling, and recreation comprises 1.31 percent of Florida’s earnings and 0.47 percent of the nation’s.

Figure 58: Projected earnings in Florida, various sectors, Tax-PI baseline forecast (in billions of current dollars)

Category	2013	2014	2015	2016	2017	2018	2019
Earnings by Place of Work	498.501	518.641	542.355	567.892	594.052	620.534	647.312
Performing arts and spectator sports	4.779	4.963	5.168	5.392	5.61	5.825	6.042
Museums, historical sites, zoos, and parks	0.258	0.271	0.286	0.302	0.32	0.337	0.355
Amusement, gambling, and recreation	6.548	6.813	7.098	7.442	7.811	8.173	8.523
Accommodation	6.886	7.117	7.372	7.657	7.93	8.195	8.456
Food services and drinking places	17.077	17.675	18.325	19.079	19.826	20.556	21.269
Category	2020	2021	2022	2023	2024	Avg. Share	
Earnings by Place of Work	673.857	699.762	726.239	754.412	785.533	N/A	
Performing arts and spectator sports	6.254	6.464	6.682	6.917	7.178	0.94%	
Museums, historical sites, zoos, and parks	0.373	0.391	0.409	0.428	0.449	0.05%	
Amusement, gambling, and recreation	8.866	9.203	9.541	9.894	10.27	1.31%	
Accommodation	8.706	8.952	9.206	9.475	9.773	1.31%	
Food services and drinking places	21.952	22.601	23.281	23.991	24.765	3.29%	

Source: Spectrum Gaming Group, Regional Economic Models Inc.

The next table shows the contributions to value added of the tourism-related industries. Value added is the gross output of an industry or a sector less its intermediate inputs or the contribution of an industry or sector to Gross State Product. Value added by industry can also be measured as the sum of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus.

Figure 59: Projected value added in Florida in selected tourism-related sectors, Tax-PI baseline forecast (in billions of current dollars)

Category	2013	2014	2015	2016	2017	2018	2019
Value Added	883.804	925.679	976.239	1027.527	1083.675	1140.887	1197.818
Performing arts and spectator sports	6.386	6.686	7.036	7.395	7.781	8.169	8.551
Museums, historical sites, zoos, and parks	0.476	0.504	0.536	0.571	0.61	0.651	0.691
Amusement, gambling, and recreation	8.801	9.233	9.719	10.246	10.828	11.42	12.003
Accommodation	14.459	15.057	15.749	16.464	17.228	17.985	18.713
Food services and drinking places	25.568	26.675	27.936	29.278	30.74	32.197	33.59
Category	2020	2021	2022	2023	2024	Avg. Share	
Value Added	1252.551	1305.214	1358.856	1415.697	1478.376	N/A	
Performing arts and spectator sports	8.917	9.268	9.632	10.019	10.445	0.71%	
Museums, historical sites, zoos, and parks	0.73	0.769	0.809	0.852	0.898	0.06%	
Amusement, gambling, and recreation	12.563	13.109	13.668	14.251	14.879	1.00%	
Accommodation	19.391	20.039	20.705	21.405	22.176	1.57%	
Food services and drinking places	34.886	36.096	37.347	38.646	40.053	2.81%	

Source: Spectrum Gaming Group, Regional Economic Models Inc.

The economic growth shown in the above table also means tax revenue growth for the state. The next table shows total and selected revenue sources over time.

Figure 60: Projected tax revenues in Florida from different gambling-related sources, Tax-PI baseline forecast (in millions of current dollars)

Revenues	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
<i>Total</i>	66.273	66.645	67.913	69.638	72.224	75.027
Gaming Taxes	0.215	0.224	0.233	0.241	0.25	0.259
Sales/Use	20.553	21.562	22.75	23.975	25.237	26.51
Lottery	1.757	1.762	1.778	1.804	1.828	1.853
Compact Revenues	0.222	0.226	0.227	0.114	0.11	0.11
All Other	43.526	42.871	42.925	43.504	44.799	46.295
Revenues	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
<i>Total</i>	77.932	80.825	84.021	87.322	90.749	94.331
Gaming Taxes	0.268	0.277	0.285	0.293	0.302	0.312
Sales/Use	27.894	29.341	30.85	32.434	34.099	35.85
Lottery	1.878	1.902	1.926	1.95	1.975	1.999
Compact Revenues	0.112	0.112	0.114	0.116	0.119	0.121
All Other	47.78	49.193	50.846	52.529	54.254	56.049

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Overall, state-level projections suggest that over the long-term, Florida's economy will be healthy. As a well-developed state economy, new industries would be expected to enhance the economic profile of the state. As the projections at the county-level in the previous parts of this report suggest, the expansion of casinos is most likely to have at least a mildly positive impact on the state's economy. We find no evidence from the analysis in Part 2 of this study that casinos would cause harm to either county-level or the state-level economy, in aggregate.

VIII. Summary and Conclusions

The analysis in this report complements the other parts of the Florida Gaming Study. In Part 2, we were tasked with examining the relationships between casinos and key economic variables, at a county-level. Two primary variables that are key indicators of economic health at the local level, are employment and wages.

Changes in employment and wages have a significant impact on other variables in a local economy. For example, as employment and wages increases, the economy grows: production increases and standards of living rise. A key component of Part 2 has been to project the relationship between the expansion of legalized gambling and employment and wages in host counties.

In order to evaluate the overall business climate in regions surrounding casinos, we also analyze a county-level measure of the number of business establishments operating in the county. Analysis of this variable provides a geospatial perspective on the impact of casinos, and whether casinos foster growth in other industries, or whether they “cannibalize” other firms in close proximity.

Our analysis uses quarterly data from the Bureau of Labor Statistics (Quarterly Census of Employment and Wages) from 2002 through 2012. We use these data to project the likely impact of introducing casinos in selected counties, as well as expanding pari-mutuels in the state to include slot-machine (or other EGMs) casinos. Our projections are based on two different analyses.

First, when available, we utilized estimated effects of casinos from a previously published study. The 2008 report by Cotti estimated county-level impacts on wages and employment from casinos across the county. Cotti analyzed all US counties, except Nevada and New Jersey, to provide empirical estimates of the casino effect. Cotti’s casino effect estimates are the best available because they are based on a dataset that is not otherwise available, and he controls for a variety of economic and demographic factors. His findings were that casinos tend to have a positive impact on both variables, but these benefits decrease the larger the county (in terms of population). This makes intuitive sense, because a particular casino will be a smaller component of a larger local economy. We would expect greater economic benefits (in percentage terms) from casinos located in less populated areas.

Second, in the cases where Cotti did not provide estimated impacts, e.g., changes in number of establishments due to casino introduction, we analyzed the impact of casino introduction in peer counties. The peer counties were chosen to match with prospective Florida counties based on population, and casino or racino experience. We utilize the estimated change in economic variable from before to after the casino began operation to develop projections for Florida counties.

Overall, our projections suggest that the introduction of casinos, whether stand-alone destination resorts, or addition of slot machines at existing pari-mutuels, will lead to modest economic benefits. In particular, we find that there would likely be a positive impact on average weekly wages and employment in the leisure and hospitality sector, as well as “other services.” (“Other services” is a sector classification that includes a wide variety of services that are not classified elsewhere in the QCEW.) However, when we consider all industries within a county, we find little significant casino effect. (Technically, the estimated effects that we consider are not statistically different from zero.) This suggests that, while some industrial sectors see increases in employment and wages, these benefits are offset in a more macro setting. Nevertheless, when we consider the state-level projections by REMI, we see that overall the Florida state economy is projected to grow at a moderate rate into the foreseeable future. Casinos would likely contribute to that, based on our analysis. Although the data suggest that employment and wage benefits that accrue to certain sectors may be offset by decreases in others (resulting in no net effect when considering all sectors), casinos may still be a driver of economic development since they provide a service that is valued by consumers and can attract additional tourists (and tourist spending) to Florida.

When we evaluate the number of establishments that operate in casino counties, we find that casinos tend to contribute to increases in the number of establishments, whatever sector we consider (i.e., “other services,” “leisure & hospitality,” or “all industries”). This suggests that casinos may help spur additional economic development in their immediate vicinity, even in consideration of the fact that there are obviously some firms and industry that must compete with casinos.

Based on our evaluation of the data and our projections, our conclusion is that casinos play the same role that other businesses do in a local economy. Since they rely on mutually beneficial voluntary transactions with consumers, both parties to the transaction benefit (i.e., the casino makes a profit, and casino patrons enjoy casino entertainment), and this activity is the foundation to economic development. In this sense, casinos can play an important role in the development of a local economy as any other firm. To their advantage, of course, is their ability to attract tourists who might not otherwise visit a region.

Of course, there are also potential negative consequences to expanding legalized gambling in Florida. Many of these issues, such as social costs, were discussed in Part 1B of the study; it was not our charge to consider those issues in Part 2 of the report.

Appendix I: Research Interviews

Spectrum Gaming Group staff and associates interviewed the following between July 2, 2013 (i.e., since the Part 1, Section A, report was completed) and August 29, 2013, as part of our research for Part 1B and Part 2 the Florida Gaming Study. The interviews were conducted in person, by telephone and/or by email, and also include respondents to our online survey of Florida pari-mutuel operators.

Last Name	First name	Affiliation	Title	Date of interview
Adkins	Dan	Mardi Gras Casino	COO	August 8, 2013
Berube	Peter	Tampa Bay Downs	General Manager	July 21, 2013
Biddix	Patrick	Melbourne Greyhound Park	General Manager	July 12, 2013
Biegalski	Leon	Division of Pari-Mutuel Wagering	Director	August 6, 2013
Catina	David	Orlando Jai Alai	General Manager	July 18, 2013
Collins	Jack	Sarasota Kennel Club	General Manager	July 16, 2013
Combest	Phil	Florida Horsemen and Benevolent Protective Association	President	July 18, 2013
Cory	Jack	Florida Greyhound Association	Lobbyist	July 29, 2013
Cotti	Chad	University of Connecticut	Associate Professor of Economics	August 24, 2013
Couch	Michael	Gulfstream Race Course	Gaming Director	July 10, 2013
Fisch	Steve	Florida Quarter Horse Owners' Association	President	July 24, 2013
Fontaine	Gale	Florida Arcade & Bingo Association	President	August 14, 2013
Francati	Daniel	Daytona Beach Kennel Club	General Manager	July 15, 2013
Galluccio	Vito	Moody's Corporation	Analyst	August 12, 2013
Glenn	Michael	Palm Beach Kennel Club	General Manager	July 6, 2013
Hater	Mike	Tampa Greyhound Track	General Manager	July 20, 2013
Havenick	Izzy	Fort Myers-Naples and Flagler greyhound tracks	Vice President	July 15, 2013
Hess	Stockton	Ebro Greyhound Park	General Manager	July 18, 2013
Hlas	Stephen	Derby Lane	Vice President	July 15, 2013
Korman	Howard	Jacksonville Greyhound Racing, Inc.	President	July 30, 2013
Lawson	Ken	Florida Department of Business & Professional Regulation	Secretary	August 6, 2013
Licciardi	Daniel	Miami Jai Alai	General Manager	July 20, 2013
Lupfer	Bill	Florida Attractions Association	CEO	August 14, 2013
Maladecki	Rich	Central Florida Hotel and Lodging Association	Director	August 14, 2013
May	Steve	Association of Racing Commissioners International	Vice President	July 7, 2013
Miller	Austin	Calder Race Course	President	July 20, 2013
Newlin	Mike	Sanford Orlando Kennel Club	General Manager	July 20, 2013
Pando	Damien	Dania Jai Alai	General Manager	July 20, 2013
Pennachio	Joseph	Florida Standardbred Breeders & Owners Association	President	August 2, August 8, 2013
Pickels	Luther	Jefferson County Kennel Club	General Manager	July 13, 2013

Last Name	First name	Affiliation	Title	Date of interview
Pierce	Jennifer	Florida Horsemen's Benevolent and Protective Association	Adviser	Several times July 20-August 15
Pinkston	Brett	PCI Gaming Authority	COO	July 19, 2013
Powell	Lonnie	Florida Thoroughbred Breeders' and Owners' Association	CEO	July 25, 2013
Richards	Robert	Hamilton Jai Alai and Poker	Owner	July 19, 2013
Ritvo	Tim	Gulfstream Race Course	President and General Manager	July 11, 2013
Shelton	Jamie	Jacksonville Greyhound Racing, Inc.	CFO	May 30, 2013
Skrob	Rob	Florida Association of Destination Management	Executive Director	August 16, 2013
Stirling	Kent	Florida Thoroughbred Horsemen's Benevolent and Protective Association	Executive Director	July 25, 2013
Theil	Carey	Grey2 K USA	Executive Director	Several times July 20-August 15
Turner	Richard	Florida Restaurant and Lodging Association	General Council	August 1, 2013
Woodburn	Jeffrey	Deputy Secretary, Florida Dept. of Business and Professional Regulation	Deputy Policy Director	August 6, 2013
Wright	Brandon	City of Davenport	Director of Finance	August 8, 2013
Wyre	Rob	Isle Casino at Pompano	General Manager	July 23, 2013
Yousef	Josellyn	Moody's Corporation	AVP Analyst	August 9, 2013